Earth Sciences Report 77-3

INDEX TO GEOLOGICAL, BEDROCK TOPOGRAPHY, SOILS, AND GROUNDWATER MAPS OF ALBERTA

J. D. Root

Alberta Research Council
1978

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INDEX TO GEOLOGICAL, BEDROCK TOPOGRAPHY, SOILS, AND GROUNDWATER MAPS OF ALBERTA

INTRODUCTION

The Alberta Research Council; the Geological Survey of Canada (Department of Energy, Mines and Resources, Ottawa); the Research Branch, Canada Department of Agriculture; and the Resource Capability Group, Alberta Energy and Natural Resources are the principal agencies involved in systematically mapping the geology, soils, bedrock topography, and hydrogeology of Alberta. This index outlines the currently available map coverage of the province published by these agencies, and attempts to provide easy reference to that coverage.

The index does not include maps published prior to 1924, for in many cases older maps have been superceded by more recent, more accurate versions. Similarly, maps published after 1924 that have been replaced by more recent publications were deleted, except where the later map is out of print or published at a significantly different scale. Also, a number of maps showing special aspects of outcrop or subsurface bedrock geology, associated in most cases with petroleum exploration or mineral resource studies, have been omitted; information on these maps and related material is available from the Energy Resources Conservation Board (Calgary, Alberta), the Alberta Society of Petroleum Geologists (Calgary, Alberta), and the indexes of various journals.

The Geological Survey of Canada has published six sheets covering Alberta and adjacent areas which provide a comprehensive index to bedrock and surficial geology maps of Alberta available from the Survey. The index sheets are numbered 72, 73, 74, 82, 83, and 84 and can be obtained, together with other information on geological maps and reports published by the Geological Survey of Canada, from:

(1) Geological Survey of Canada
601 Booth Street
Ottawa, Ontario K1A 0E8

(2) Institute of Sedimentary and Petroleum Geology
3303 - 33 Street N.W.
Calgary, Alberta T2L 2A7

For further information on geological, groundwater, bedrock topography, and detailed soils maps and reports published by the Alberta Research Council, write to:

Publications
Alberta Research Council
11315 - 87 Avenue
Edmonton, Alberta T6G 2C2

A free "List of Publications" is available on request.

Exploratory and reconnaissance soils maps and reports are printed by the University of Alberta. Copies can be obtained from:

Department of Extension
University of Alberta
Edmonton, Alberta T6G 2G4

ACKNOWLEDGMENTS

G.B. Mellon, former Head of the Geology Division,* Alberta Research Council, provided the original impetus for the report. R. Green, Chief of the Earth Sciences Branch, Alberta Research Council, provided the financial support for the third edition; many thanks to him and his staff of editors. R. Shelford and Z. Nemeth of the Resource Capability Group, Alberta Energy and Natural Resources, provided the information on that agency's surficial deposits and landform map series.

USE OF THE INDEX MAPS

The index maps are essentially self-explanatory. The National Topographic System grid is shown on each map so that an area of interest can be identified quickly. Each index map is accompanied by a numbered legend which gives a description of the map coverage. Areas which have map coverage are numbered on the index map in accordance with corresponding numbers in the legend. The legend is generally chronologically arranged by publication date so that early maps have low index numbers and more recent maps have higher numbers. Where two maps of an area are available, the index map is given the number corresponding to the earliest map published; this map and the later map are then listed in the legend.

To make the index maps more readable and to avoid any ambiguity where map areas overlap or where smaller maps are contained within a larger map, the index number is repeated in two or more corners of the box denoting the map area. A dashed line *within* any numbered box indicates that map coverage is provided by separate adjacent sheets within the area. Maps covering large areas have a dashed outline in order that they may be distinguished from multiple maps covering part or all the same area. Dashed lines are also used for segments of map areas that extend beyond Alberta's boundaries.

Maps referred to as "Open File" or "Open File No.__" indicate that the map and associated information has not been published but may be viewed, usually by appointment, at the library

*Now Deputy Minister, Non-Renewable Resources, Alberta Energy and Natural Resources.

of the agency which produced the information. Alberta Research Council open file information may be viewed at:

Publications
Alberta Research Council
11315 - 87 Avenue
Edmonton, Alberta T6G 2C2

Geological Survey of Canada open file information may be viewed at:

(1) The Institute of Sedimentary and Petroleum Geology
3303 - 33 Avenue, N.W.
Calgary, Alberta T2L 2A7

(2) The Library
601 Booth Street
Ottawa, Ontario K1A 0E8

(3) The British Columbia Office of the Geological Survey of Canada
100 West Pender Street
Vancouver, British Columbia V6B 1R8

For a complete list of locations where Geological Survey of Canada open file information may be viewed write to:

Geological Survey of Canada
601 Booth Street
Ottawa, Ontario K1A 0E8

Copies of some open file information produced by the Geological Survey of Canada may be purchased from:

Riley's Reproductions and Printing Limited
631 - 8th Avenue S. W.
Calgary, Alberta T2P 0W9

ABBREVIATIONS

The Alberta Research Council (A.R.C.) has been called "The Research Council of Alberta" (R.C.A.) and "Alberta Research" (A.R.). At present, the title "Alberta Research Council" is in use but all these names and acronyms are synonymous. In order to avoid confusion when publications are requested, the maps and publications listed in this index retain their original title (for example, Research Council of Alberta Report 65-2, Alberta Research Council Bulletin 32).

Geological Survey of Canada publications occasionally have the abbreviation G.S.C.

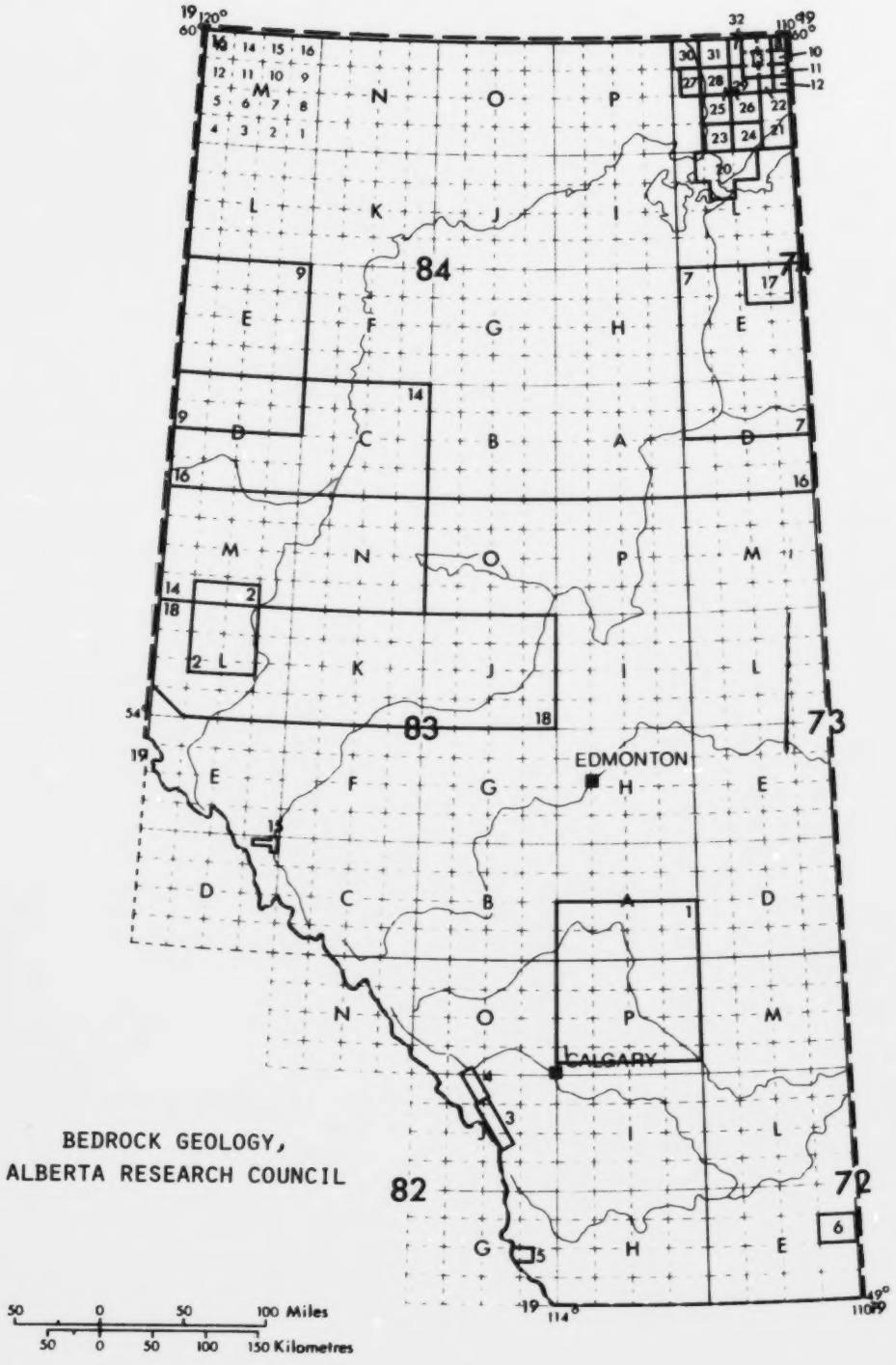
INDEX MAPS

BEDROCK GEOLOGY

Bedrock geology maps show the distribution, lithology, age, and structure (attitude) of rock formations at or near the surface. In Alberta these rock units or formations range in age and composition from ancient Precambrian crystalline rocks (Canadian Shield) in the northeast corner of the province to nearly flat-lying Tertiary sandstones and shales in the west-central and southwest Plains. The Rocky Mountains and Foothills are underlain by complexly faulted and folded sedimentary strata ranging in age from Precambrian to Tertiary.

Bedrock formations are covered in most parts of Alberta, especially the Plains, by unconsolidated surficial deposits of glacial (Pleistocene) and postglacial origins ranging in thickness from a few metres to several hundred metres. Consequently, most bedrock geology maps generally show formation boundaries *projected* to the surface rather than to the actual bedrock-glacial drift contact; that is, the maps assume that surficial deposits are thin or absent over much or all of the area under consideration. This assumption can lead to some problems in map interpretation where surficial deposits are thick and the underlying bedrock topography is complex.

The distribution of major bedrock formations in Alberta is summarized on a scale of 1 inch = 20 miles in the Geological Map of Alberta, published in 1972 by the Alberta Research Council (see item 19 below).


EDMONTON
CALGARY
84
83
82
73
72
BEDROCK GEOLOGY,
ALBERTA RESEARCH COUNCIL
50 0 50 100 Miles
50 0 50 100 150 Kilometres

Bedrock Geology - Alberta Research Council

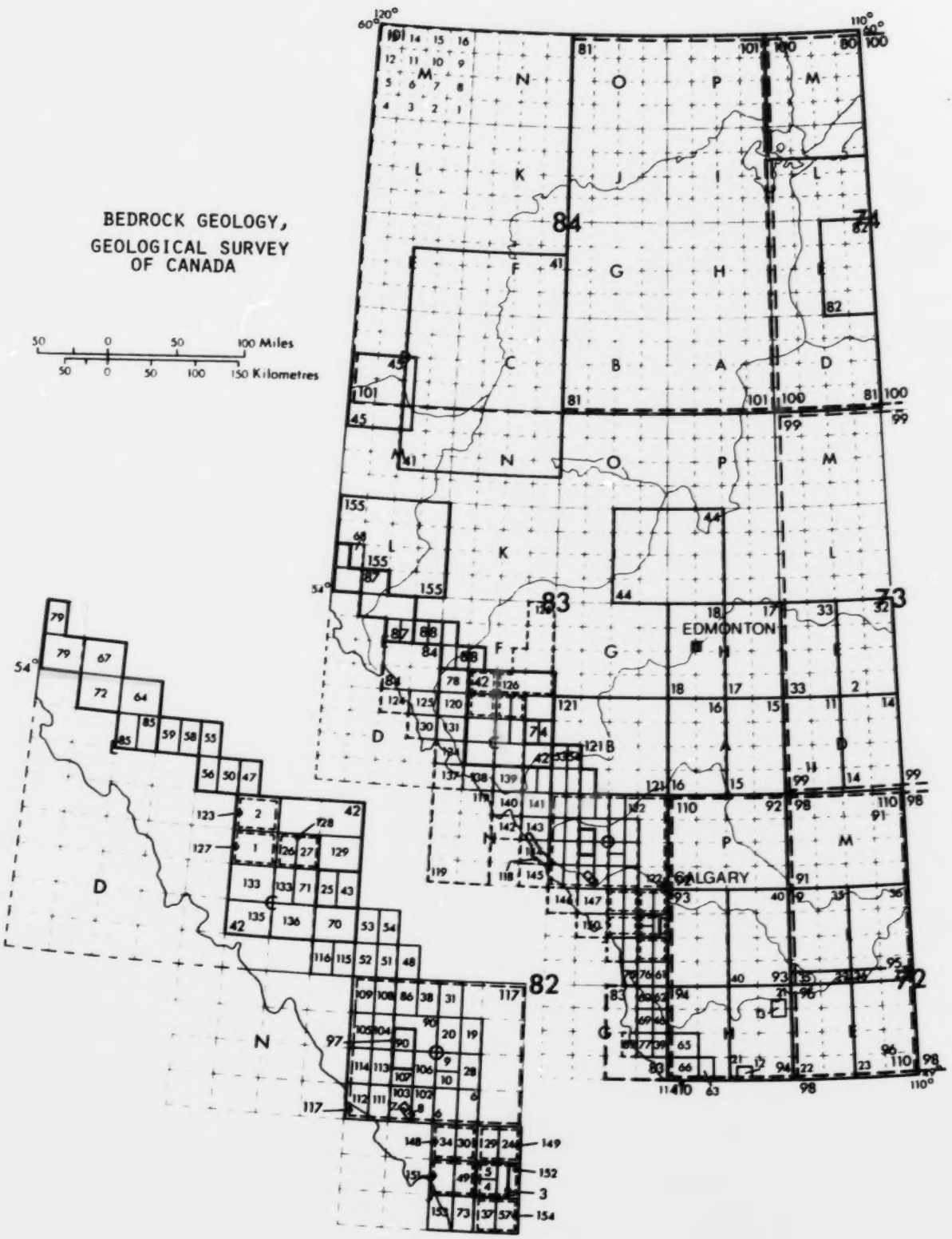
Number on index map	Description
1	Geological map, Rosebud and Red Deer sheets; J.A. Allan and J.O.G. Sanderson, 1947. Scale 1 inch = 4 miles. Accompanies R.C.A. Report 13 as Map 9A.
2	Coal occurrences, Wapiti-Cutbank area; J.A. Allan and J.L. Carr, 1946. Scale 1 inch = 3 miles (approx.). Accompanies R.C.A. Report 48 as Map 19.
3	Geological map, Highwood-Elbow area; J.A. Allan and J.L. Carr, 1947. Scale 1 inch = 1 mile. Accompanies R.C.A. Report 49 as Map 20.
4	Ribbon Creek area; M.B.B. Crockford, 1949. Scale 1 inch = 1 mile. Accompanies R.C.A. Report 52 as Map 21.
5	Carbondale River area; W.H.A. Clow and M.B.B. Crockford, 1950. Scale 1 inch = 1 mile. Accompanies R.C.A. Report 59 as Map 22.
6	Elkwater Lake area; M.B.B. Crockford, 1951. Scale 1 inch = 1 mile. Accompanies R.C.A. Report 61 as Map 23.
7	Geology of McMurray area, Alberta; M.A. Carrigy and G.A. Collins, 1959. Scale 1 inch = 4 miles. Accompanies R.C.A. Memoir 1 as Map 26.
8	Geology of Andrew Lake, north district, Alberta; J.D. Godfrey, 1960. Scale 1 inch = 1/2 mile. Accompanies R.C.A. Report 58-3 as Map 58-3A.
9	Geology of the Chinchaga River and Clear Hills (north half) map areas, Alberta; R. Green and G.B. Mellon, 1962. Scale 1 inch = 8 miles. Accompanies R.C.A. Report 62-8.
10	Geology of Andrew Lake, south district; J.D. Godfrey, 1963. Scale 1 inch = 1/2 mile. Accompanies R.C.A. Report 61-2 as Map 61-2A.
11	Geology of the St. Agnes Lake district; J.D. Godfrey and E.W. Peikert, 1963. Scale 1 inch = 1/2 mile. Accompanies R.C.A. Report 62-1 as Map 62-1A.
12	Geology of the Colin Lake district; J.D. Godfrey and E.W. Peikert, 1964. Scale 1 inch = 1/2 mile. Accompanies R.C.A. Report 62-2 as Map 62-2A.

Bedrock Geology - Alberta Research Council (continued)

Number on index map	Description
13	Geology of Bayonet Lake district; Charles Lake, north district; Ashton Lake district; Charles Lake, central district; Potts Lake district; and Charles Lake, south district; J.D. Godfrey, 1966. Scale 1 inch = 1/2 mile. Accompanies R.C.A. Report 65-6 as Maps 65-6A to 6F respectively.
14	Bedrock geology of the Peace River district, Alberta; J.F. Jones and R. Green, 1966. Scale 1 inch = 8 miles. Accompanies R.C.A. Bulletin 16 as Map 27.
15	Jasper and vicinity; Geikie Siding; H.A.K. Charlesworth *et al.*, 1967. Scale 1 inch = 1/4 mile. Accompanies R.C.A. Bulletin 23 as Maps 30 and 31 respectively.
16	Bedrock geology of northern Alberta; R. Green, M.A. Carrigy, and G.B. Mellon, 1970. Scale 1:500,000.
17	Geology of the Marguerite River district, Alberta; J.D. Godfrey, 1970. Scale 1 inch = 1 mile.
18	Bedrock geology, northwest-central Alberta; J.W. Kramers and G.B. Mellon, 1972. Scale 1 inch = 24 miles (approx.). In R.C.A. Information Series No. 60, pp. 109-124.
19	Geological map of Alberta; R. Green, 1972. Scale 1 inch = 20 miles.
20	Bedrock geology of the Fort Chipewyan district, Alberta; J.D. Godfrey. Scale 1 inch = 1/2 mile. (in press)
21	Bedrock geology, Wylie Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
22	Bedrock geology, Alexander Lake district; J.D. Godfrey *et al.*, 1978. Scale 1 inch = 1/2 mile.
23	Bedrock geology, Ryan Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)

Bedrock Geology - Alberta Research Council (continued)

Number on index map	Description
24	Bedrock geology, Fletcher Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
25	Bedrock geology, Bocquene Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
26	Bedrock geology, Turtle Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
27	Bedrock geology, South Fitzgerald district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
28	Bedrock geology, Myers Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
29	Bedrock geology, Daly Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
30	Bedrock geology, North Fitzgerald district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
31	Bedrock geology, Tulip Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)
32	Bedrock geology, Mercredi Lake district; J.D. Godfrey *et al.* Scale 1 inch = 1/2 mile. (in preparation)


BEDROCK GEOLOGY,
GEOLOGICAL SURVEY
OF CANADA
50 0 50 100 Miles
50 0 50 100 150 Kilometres
EDMONTON
CALGARY
84
83
82
74
73
72

Bedrock Geology - Geological Survey of Canada

Number on index map	Description
1	Mountain Park; B.R. MacKay, 1929. Map 208A, scale 1 inch = 1 mile. See also No. 127.
2	Cadomin; B.R. MacKay, 1929. Map 209A, scale 1 inch = 1 mile. See also No. 123.
3	Turner Valley; G.S. Hume, 1931. Map 257A, scale 1 inch = 1 mile. See also No. 152.
4	Turner Valley (southwest quarter); G.S. Hume, 1931. Map 261A, scale 1 inch = 1/2 mile. See also No. 152.
5	Turner Valley (northwest quarter); G.S. Hume, 1931. Map 262A, scale 1 inch = 1/2 mile. See also No. 152.
6	Jumpingpound Creek (east half); N.C. Ollerenshaw, 1976. Map 1419A, scale 1:50,000.
6	Jumpingpound Creek (west half); N.C. Ollerenshaw, 1976. Map 1420A, scale 1:50,000.
7	Canmore, north portion; B.R. MacKay, 1935. Map 322A, scale 1 inch = 800 feet.
8	Canmore, south portion; B.R. MacKay, 1935. Map 323A, scale 1 inch = 800 feet.
9	Wildcat Hills, (northwest quarter); G.S. Hume, 1936. Map 325A, scale 1 inch = 1/2 mile. Accompanies G.S.C. Memoir 188.
10	Wildcat Hills (southwest quarter); G.S. Hume, 1936. Map 326A, scale 1 inch = 1/2 mile. Accompanies G.S.C. Memoir 188.
9, 10	Wildcat Hills (west half); N.C. Ollerenshaw, 1972. Map 1351A, scale 1:50,000.
11	Hardisty; P.S. Warren and G.S. Hume, 1937. Map 502A, scale 1 inch = 4 miles.
12	Del Bonita area; L.S. Russell, 1937. Map 37-10, scale 1 inch = 1/2 mile.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
13	Taber district; L.S. Russell and J.C. Sproule, 1937. Map 37-14, scale 1 inch = 1 mile.
14	Ribstone Creek; P.S. Warren and G.S. Hume, 1939. Map 501A, scale 1 inch = 4 miles.
15	Stettler; R.L. Rutherford, 1939. Map 503A, scale 1 inch = 4 miles.
16	Red Deer; R.L. Rutherford, 1939. Map 504A, scale 1 inch = 4 miles.
17	Tofield; R.L. Rutherford, 1939. Map 505A, scale 1 inch = 4 miles.
18	Edmonton; R.L. Rutherford, 1939. Map 506A, scale 1 inch = 4 miles.
19	Fallentimber (east half); B.R. MacKay, 1939. Map 548A, scale 1 inch = 4 miles.
20	Fallentimber (west half); B.R. MacKay, 1939. Map 549A, scale 1 inch = 1 mile.
19, 20	Fallentimber Creek; N.C. Ollerenshaw, 1974. Map 1387A, scale 1:50,000.
21	Taber; L.S. Russell, 1940. Map 565A, scale 1 inch = 4 miles. Accompanies G.S.C. Memoir 221.
22	Foremost; L.S. Russell, 1940. Map 566A, scale 1 inch = 4 miles. Accompanies G.S.C. Memoir 221.
23	Dunmore; L.S. Russell, 1940. Map 567A, scale 1 inch = 4 miles. Accompanies G.S.C. Memoir 221.
24	Midnapore; G.S. Hume, 1940. Map 606A, scale 1 inch = 4 miles. See also No. 149.
25	Wapiabi Creek; B.R. MacKay, 1940. Map 40-13, scale 1 inch = 1/2 mile.
26	Grave Flats; B.R. MacKay, 1940. Map 40-15, scale 1 inch = 1/2 mile. See also No. 128.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
27	Pembina Forks; B.R. MacKay, 1940. Map 40-16, scale 1 inch = 1/2 mile. See also No. 128.
28	Wildcat Hills (east half); G.S. Hume and C.O. Hage, 1941. Map 652A, scale 1 inch = 1 mile.
29	Fish Creek; G.S. Hume, 1941. Map 667A, scale 1 inch = 1 mile. See also No. 149.
30	Bragg Creek; G.S. Hume and H.H. Beach, 1942. Map 654A, scale 1 inch = 1 mile. See also No. 148.
31	Bearberry; H.H. Beach, 1942. Map 670A, scale 1 inch = 1 mile.
32	Kitscoty; C.H. Crickmay, G.S. Hume and C.O. Hage, 1942. Map 673A, scale 1 inch = 4 miles. Accompanies G.S.C. Memoir 232.
33	Innisfree; C.H. Crickmay, G.S. Hume and C.O. Hage, 1942. Map 674A, scale 1 inch = 4 miles. Accompanies G.S.C. Memoir 232.
34	Moose Mountain; H.H. Beach, 1942. Map 688A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 236. See also No. 148.
35	Brooks; J.S. Stewart, 1942. Map 695A, scale 1 inch = 4 miles.
36	Redcliff; J.S. Stewart, 1942. Map 696A, scale 1 inch = 4 miles.
37	Pekisko Creek; G.S. Hume and C.O. Hage, 1942. Map 698A, scale 1 inch = 1 mile. See also No. 154.
38	Marble Mountain; N.C. Ollerenshaw, 1970. Map 7-1969, scale 1:50,000.
39	Beaver Mines; C.O. Hage, 1943. Map 739A, scale 1 inch = 1 mile.
40	Bassano; J.S. Stewart, 1943. Map 741A, scale 1 inch = 4 miles.
41	Sexsmith-Bison Lake districts; L.S. Russell, 1943. Preliminary map, scale 1 inch = 4 miles. G.S.C. Miscellaneous publication.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
42	Foothills belt, central Alberta; B.R. MacKay, 1943. Map 43-3, scale 1 inch = 2 miles.
43	Wawa Creek; B.R. MacKay, 1943. Map 43-10, scale 1 inch = 1/2 mile.
44	Athabasca-Barrhead districts; M. Feniak, 1944. Map 44-6, scale 1 inch = 4 miles.
45	Pouce Coupé-Peace River districts; C.H. Crickmay, 1944. Map 44-31, scale 1 inch = 2 miles.
46	Cowley; C.O. Hage, 1945. Map 816A, scale 1 inch = 1 mile.
47	Pedley; E.J.W. Irish, 1945. Map 838A, scale 1 inch = 1 mile.
48	Tay River; J.F. Henderson, 1945. Map 840A, scale 1 inch = 1 mile.
49	Dyson Creek; C.O. Hage, 1946. Map 827A, scale 1 inch = 1 mile. See also No. 151.
50	Entrance; A.H. Lang, 1946. Map 843A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 224.
51	Fall Creek; J.F. Henderson, 1946. Map 883A, scale 1 inch = 1 mile.
52	Cripple Creek; O.A. Erdman, 1946. Map 46-22, scale 1 inch = 1/2 mile.
53	Alexo; G.P. Crombie and O.A. Erdman, 1947. Map 884A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 254.
54	Saunders; O.A. Erdman, 1947. Map 885A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 254.
55	Gregg Lake; E.J.W. Irish, 1947. Map 899A, scale 1 inch = 1 mile.
56	Brûlé; A.H. Lang, 1947. Map 905A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 244.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
57	Stimson Creek (east half); G.S. Hume, 1949. Map 934A, scale 1 inch = 1 mile. See also No. 154.
58	Moberly Creek; A.H. Lang, 1949. Map 963A, scale 1 inch = 1 mile.
59	Moon Creek; E.J.W. Irish, 1949. Map 968A, scale 1 inch = 1 mile.
60	Gap; R.J.W. Douglas, 1949. Map 978A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 255.
61	Langford Creek; R.J.W. Douglas, 1949. Map 981A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 255.
62	Callum Creek; G. Shaw and R.J.W. Douglas, 1949. Map 982A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 255.
63	Cardston; E.P. Williams, 1949. Map 49-3, scale 1 inch = 1/2 mile.
64	Pierre Greys Lakes; A.H. Lang and E.J.W. Irish, 1951. Map 996A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 258.
65	Pincher Creek; R.J.W. Douglas, 1951. Map 51-22, scale 1:40,000.
66	Waterton; R.J.W. Douglas, 1952. Map 52-10, scale 1 inch = 3/4 mile.
67	Copton Creek; E.J.W. Irish, 1954. Map 1041A, scale 1 inch = 1 mile.
68	Two Lakes; H.R. Greiner, 1955. Map 55-14, scale 1 inch = 1 mile.
69	Blairmore; D.K. Norris, 1955. Map 55-18, scale 1 inch = 1 mile.
70	Nordegg; B.R. MacKay and R.J.W. Douglas, 1956. Map 55-34, scale 1 inch = 1 mile.
71	George Creek (east half); R.J.W. Douglas, 1956. Map 55-39, scale 1 inch = 1 mile.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
72	Grande Cache; E.J.W. Irish and R. Thorsteinsson, 1957. Map 1049A, scale 1 inch = 1 mile.
73	Mount Head; R.J.W. Douglas, 1958. Map 1052A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 291.
74	Chungo Creek; R.J.W. Douglas, 1958. Map 58-3, scale 1 inch = 1 mile.
75	Beehive Mountain; D.K. Norris, 1958. Map 58-5, scale 1 inch = 1 mile.
76	Livingstone River; D.K. Norris, 1958. Map 5-1958, scale 1 inch = 1 mile.
77	Carbondale River; D.K. Norris, 1959. Map 5-1959, scale 1 inch = 1 mile.
78	Miette; E.W. Mountjoy, 1960. Map 40-1959, scale 1 inch = 1 mile.
79	Smoky and Pine Rivers areas; D.F. Stott, 1960. Map 21-1960, scale 1 inch = 4 miles. Accompanies G.S.C. Paper 60-16.
80	Fort Fitzgerald district; G.C. Riley, 1960. Map 12-1960, scale 1 inch = 4 miles.
81	Devonian strata in northeastern Alberta and northwestern Saskatchewan; A.W. Norris, 1960. Accompanies G.S.C. Memoir 313 as Figure 3, scale 1 inch = 12 miles.
82	Firebag River district; L.P. Tremblay, 1961. Map 16-1961, scale 1 inch = 4 miles.
83	Fernie (east half); R.A. Price, 1962. Map 35-1961, scale 1 inch = 2 miles. Accompanies G.S.C. Paper 61-24.
84	Mount Robson; E.W. Mountjoy, 1964. Map 47-1963, scale 1 inch = 2 miles.
85	Adams Lookout; E.J.W. Irish and J.K. Eccles, 1964. Map 1104A, scale 1 inch = 1 mile.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
86	Limestone Mountain; N.C. Ollerenshaw, 1969. Map 8-1968, scale 1:50,000. Accompanies G.S.C. Paper 68-24.
87	Rocky Mountain Foothills, latitudes 53°30' and 54°15' (sheet 1); E.J.W. Irish, 1965. Map 1139A, scale 1 inch = 2 miles. Accompanies G.S.C. Memoir 334.
88	Rocky Mountain Foothills, latitudes 53°15' and 53°45' (sheet 2); E.J.W. Irish, 1965. Map 1140A, scale 1 inch = 2 miles. Accompanies G.S.C. Memoir 334.
89	Flathead district (east half); R.A. Price, 1965. Map 1154A, scale 1 inch = 1 mile. Accompanies G.S.C. Memoir 336.
90	Burnt Timber Creek; N.C. Ollerenshaw, 1966. Map 11-1965, scale 1 inch = 1 mile.
91	Oyen; E.J.W. Irish, 1967. Map 21-1966, scale 1 inch = 4 miles.
92	Drumheller; E.J.W. Irish, 1967. Map 5-1967, scale 1 inch = 4 miles.
93	Gleichen; E.J.W. Irish, 1968. Map 19-1967, scale 1 inch = 4 miles.
94	Lethbridge; E.J.W. Irish, 1968. Map 20-1967, scale 1 inch = 4 miles.
95	Medicine Hat; E.J.W. Irish, 1968. Map 21-1967, scale 1 inch = 4 miles.
96	Foremost; E.J.W. Irish, 1968. Map 22-1967, scale 1 inch = 4 miles.
97	Panther culmination; N.C. Ollerenshaw, 1968. Map 24-1967, scale 1 inch = 4 miles.
98	South Saskatchewan River; A.H. Lang, 1965. Map 1165A, scale 1:1,000,000.
99	North Saskatchewan River; A.H. Lang, 1965. Map 1163A, scale 1:1,000,000.
100	Clearwater River; A.H. Lang, 1965. Map 1162A, scale 1:1,000,000.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
101	Hay River; A.H. Lang, 1965. Map 1161A, scale 1:1,000,000.
102	Canmore (east half); R.A. Price, 1970. Map 1265A, scale 1:50,000.
103	Canmore (west half); R.A. Price, 1970. Map 1266A, scale 1:50,000.
104	Barrier Mountain (east half); R.A. Price, 1970. Map 1273A, scale 1:50,000.
105	Barrier Mountain (west half); R.A. Price, 1970. Map 1274A, scale 1:50,000.
106	Lake Minnewanka (east half); R.A. Price and N.C. Ollerenshaw, 1971. Map 1271A, scale 1:50,000.
	Lake Minnewanka (east half); N.C. Ollerenshaw, 1972. Map 1347A, scale 1:50,000.
107	Lake Minnewanka (west half); R.A. Price and N.C. Ollerenshaw, 1971. Map 1272A, scale 1:50,000.
108	Scalp Creek (east half); R.A. Price and N.C. Ollerenshaw, 1971. Map 1275A, scale 1:50,000.
109	Scalp Creek (west half); R.A. Price and N.C. Ollerenshaw, 1971. Map 1276A, scale 1:50,000.
110	Southern Plains of Alberta; E.J.W. Irish, 1971. Map 1286A, scale 1:50,000.
111	Banff (east half); R.A. Price and E.W. Mountjoy, 1972. Map 1294A, scale 1:50,000.
112	Banff (west half); R.A. Price and E.W. Mountjoy, 1972. Map 1295A, scale 1:50,000.
113	Mount Eisenhower (east half); R.A. Price and E.W. Mountjoy, 1972. Map 1296A, scale 1:50,000.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
114	Mount Eisenhower (west half); R.A. Price and E.W. Mountjoy, 1972. Map 1297A, scale 1:50,000.
115	Whiterabbit Creek (east half); E.W. Mountjoy and R.A. Price, 1975. Map 1388A, scale 1:50,000.
116	Whiterabbit Creek (west half); E.W. Mountjoy and R.A. Price, 1975. Map 1389A, scale 1:50,000.
117	Calgary; N.C. Ollerenshaw, 1975. Open file 249*, scale 1:250,000.
118	Geology of the Main Ranges of the Rocky Mountains from Vermilion Pass to Blaeberry River and Bow Lake, British Columbia - Alberta; D.G. Cook, 1973. Map 1368A, scale 1:75,000. Accompanies Geological Survey of Canada Bulletin 233. See also No. 143 and No. 144.
119	Roger's Pass (Golden; west half); J.O. Wheeler, 1963. Scale 1 inch = 4 miles. Map 43-1962. Accompanies G.S.C. Paper 62-32.
120	Medicine Lake (east and west halves); E.J. Mountjoy, 1976. Scale 1:50,000. Open file number 372, unedited; may be viewed by appointment at G.S.C. Library, Calgary. Copies may be obtained from Riley's Reproductions and Printing Limited, 631 - 8th Avenue S.W., Calgary, Alberta, T2P 0W9.
121	Rocky Mountain House (unpublished portion of 1:250,000 map sheet 83B). Scale 1:250,000. (in progress, 1975).
122	Calgary (unpublished portion of 1:250,000 NTS 820). Scale 1:250,000. (in progress, 1975).
123	Cadomin (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 2 and No. 42.
124	Rainbow (east and west halves). Scale 1:50,000. (in progress, 1975).

*Available for study at the Geological Survey of Canada Library, Calgary. See also "USE OF THE INDEX."

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
125	Jasper (east and west halves). Scale 1:50,000. (in progress, 1975).
126	Edson (sections 83F1, 2, 7E, 8, 9, and 16 of 1:250,000 map sheet). Scale 1:250,000. (in progress, 1975). See also No. 42 for 83F1, 2.
127	Mountain Park (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 1.
128	Pembina Forks (83C15E) and Grave Flats (83C15W). Scale 1:50,000. (in progress, 1975). See also No. 27 and No. 26 respectively.
129	Brown Creek (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 42.
130	Amethyst Lakes (east and west halves). Scale 1:50,000. (in progress, 1975).
131	Athabasca Falls (east and west halves). Scale 1:50,000. (in progress, 1975).
132	Southesk (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 42.
133	George Creek (west half). Scale 1:50,000. (in progress, 1975). See also No. 42.
134	Fortress Lake (east and west halves). Scale 1:50,000. (in progress, 1975).
135	Sunwapta (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 42.
136	Job Creek (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 42.
137	Clemenceau Icefields (east and west halves). Scale 1:50,000. (in progress, 1975).

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
138	Columbia Icefield (east and west halves). Scale 1:50,000. (in progress, 1975).
139	Cline River (east and west halves). Scale 1:50,000. (in progress, 1975).
140	Mistaya Lake (east and west halves). Scale 1:50,000. (in progress, 1975).
141	Siffleur River (east and west halves). Scale 1:50,000. (in progress, 1975).
142	Blaeberry River (east and west halves). Scale 1:50,000. (in progress, 1975).
143	Hector Lake (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 118.
144	Lake Louise (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 118.
145	Mount Goodsir (east and west halves). Scale 1:50,000. (in progress, 1975).
146	Mount Assiniboine (east and west halves). Scale 1:50,000. (in progress, 1975).
147	Evans-Thomas Creek (east half) and Spray Lake (west half). Scale 1:50,000. (in progress, 1975).
148	Bragg Creek (east half) and Moose Mountain (west half). Scale 1:50,000. (in progress, 1975). See also No. 30 and No. 34 respectively.
149	Priddis (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 24 and No. 29.

Bedrock Geology - Geological Survey of Canada (continued)

Number on index map	Description
150	Kananaskis Lakes (east and west halves). Scale 1:50,000. (in progress, 1975).
151	Dyson Creek (east half) and Mount Rae (west half). Scale 1:50,000. (in progress, 1975). See also No. 49.
152	Turner Valley (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 3, No. 4, and No. 5.
153	Mount Head (west half). Scale 1:50,000. (in progress, 1975).
154	Stimson Creek (east and west halves). Scale 1:50,000. (in progress, 1975). See also No. 57 and No. 37.
155	Wapiti (unpublished portion of 1:250,000 NTS 83L). Scale 1:250,000. (in progress, 1975).

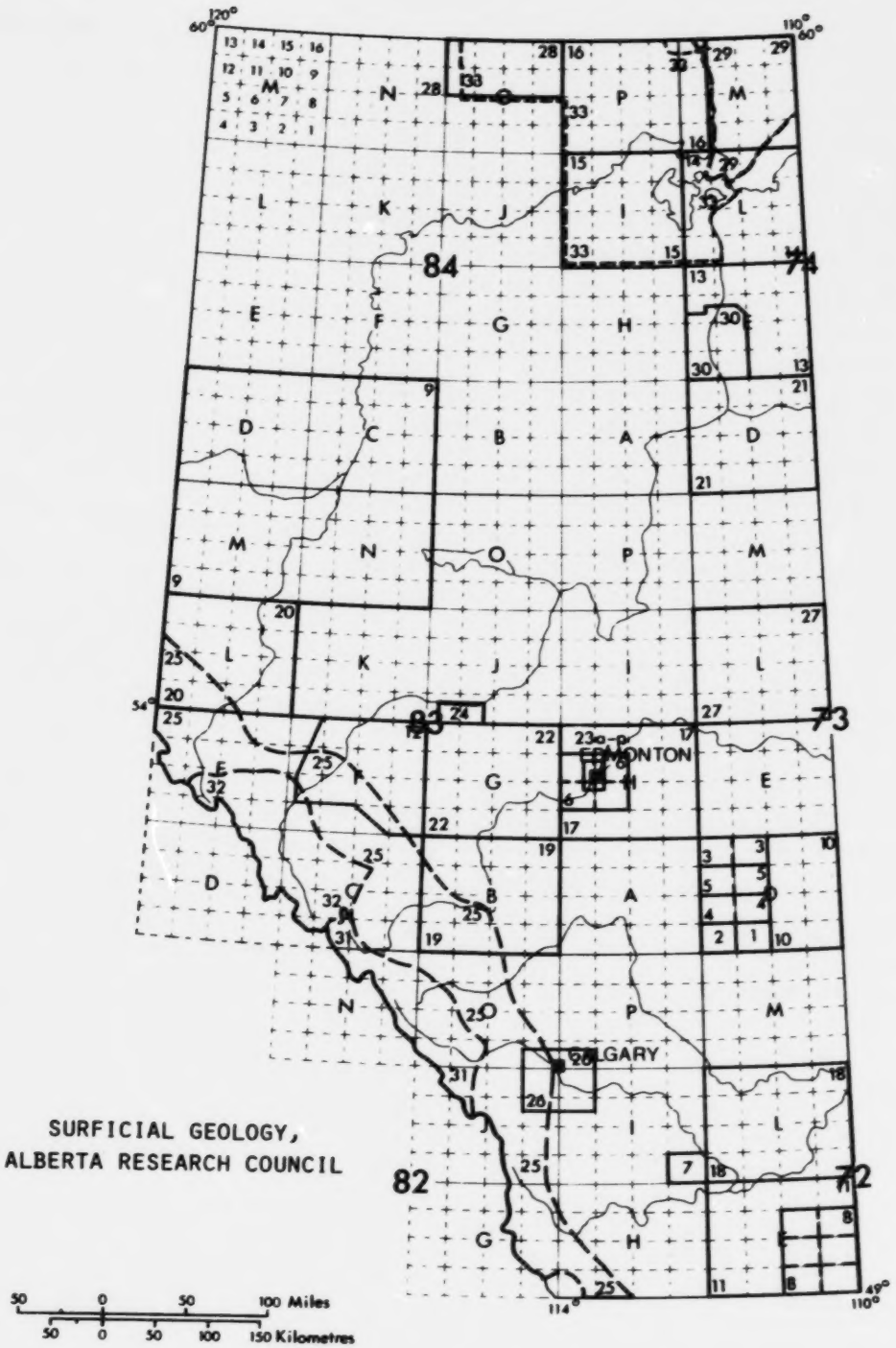
SURFICIAL GEOLOGY

Surficial geology maps show the types, distribution, and origin of the unconsolidated materials which overlie the bedrock in most parts of Alberta. Much of this material consists of sediments of glacial or proglacial origin (drift) deposited during or shortly after the melting of the mountain glaciers and the large continental ice sheet which covered most of the province during Pleistocene time. These deposits include till, outwash sand and gravel, lake sediments, and eolian sand dunes; their thickness varies and may be as great as 100 metres in some areas.

Other types of surficial deposits are recent (postglacial) sediments deposited in streams and rivers (alluvium), in lakes and sloughs, and in the modern deltas of the Peace and Athabasca rivers in northeastern Alberta. Scattered deposits of preglacial sands and gravels are found beneath the glacial drift in various parts of the province, and many of the higher slopes and ridges in the Rocky Mountains and Foothills are covered by a thin veneer of weathered bedrock rubble and soil called colluvium.

Maps showing the gross thicknesses of surficial deposits for many parts of the Plains are published with the Bedrock Topography Series, described later in the index.

The Resource Capability Group, Alberta Energy and Natural Resources, is preparing a series of maps at 1:63,360 scale (forestry plannimetric series base maps) which delineate landforms, surficial deposits (soil parent material), soil texture, and slope. The maps are prepared by various authors and provide useful detailed information. These maps are *not* published information at present, but they may be *viewed by appointment* with the Resource Capability Group. No index is provided for this series of maps as they are as yet unpublished. Areas of interest may be referred to by using the National Topographic System grid provided by the base map. Considerable information in related environmental fields (forest capability, agricultural lands and so on) may be obtained from data banks established by various departments of the Provincial Government.



SURFICIAL GEOLOGY,
ALBERTA RESEARCH COUNCIL

50 0 50 100 Miles
50 0 50 100 150 Kilometres

Surficial Geology - Alberta Research Council

Number on index map	Description
1	Glacial geology, Coronation district; C.P. Gravenor and L.A. Bayrock, 1955. Scale 1 inch = 1 mile. Accompanies R.C.A. Report 55-1.
2	Glacial geology, Castor district; C.P. Gravenor, 1956. Scale 1 inch = 1 mile. Accompanies R.C.A. Report 56-2.
3	Glacial geology, Sedgewick district; C.P. Gravenor and R.B. Ellwood, 1957. Two maps, scale 1 inch = 1 mile. Accompanies R.C.A. Report 57-1.
4	Glacial geology, Alliance-Brownfield district; L.A. Bayrock, 1958. Two maps, scale 1 inch = 1 mile. Accompanies R.C.A. Report 57-2.
5	Glacial geology, Galahad-Hardisty district; L.A. Bayrock, 1958. Two maps, scale 1 inch = 1 mile. Accompanies R.C.A. Report 57-3.
6	Surficial geology, Edmonton district; L.A. Bayrock and G.M. Hughes, 1962. Four maps, scale 1 inch = 1 mile. Accompanies R.C.A. Report 62-6.
7	Surficial geology, Vauxhall district; L.A. Bayrock and J.F. Jones, 1963. Scale 1 inch = 1 mile. Accompanies R.C.A. Report 63-2.
8	Surficial geology, Cypress Hills; J.A. Westgate, 1965. Six maps, scale 1 inch = 1 mile. Accompanies R.C.A. Report 65-2.
9	Surficial deposits of the Peace River district, Alberta; J.F. Jones, 1966. Scale 1 inch = 8 miles. Accompanies R.C.A. Bulletin 16.
10	Surficial geology, Wainwright area (east half), Alberta; L.A. Bayrock, 1967. Eight maps, scale 1 inch = 1 mile. Accompanies R.C.A. Report 67-4.
11	Surficial geology, Foremost-Cypress Hills; J.A. Westgate, 1968. Scale 1:250,000. Accompanies R.C.A. Bulletin 22.
12	Surficial geology, Edson area; M.A. Roed, 1970. Scale 1:250,000 (excludes most of the southwestern part of the area contained within the Foothills region).

Surficial Geology - Alberta Research Council (continued)

Number on index map	Description
13	Surficial geology, Bitumount; L.A. Bayrock, 1971. Scale 1:250,000.
14	Surficial geology, Fort Chipewyan; L.A. Bayrock, 1972. Scale 1:250,000.
15	Surficial geology, Lake Claire; L.A. Bayrock, 1972. Scale 1:250,000.
16	Surficial geology, Peace Point and Fitzgerald (part); L.A. Bayrock, 1972. Scale 1:250,000.
17	Surficial geology, Edmonton; L.A. Bayrock, 1972. Scale 1:250,000. Accompanies A.R.C. Bulletin 32.
18	Surficial geology, Medicine Hat; T.E. Berg and R.A. McPherson, 1972. Scale 1:250,000.
19	Surficial geology, Rocky Mountain House; A.N. Boydell, L.A. Bayrock, and T.H.F. Reimchen, 1972. Scale 1:250,000.
20	Surficial geology, Wapiti; L.A. Bayrock and T.H.F. Reimchen. Scale 1:250,000. (open file)
21	Surficial geology, Waterways; L.A. Bayrock and T.H.F. Reimchen, 1974. Scale 1:250,000.
22	Surficial geology, Wabamun Lake area; M.M. Fenton, L.D. Andriashek, and J.D. Root. Scale 1:250,000. (in preparation)
23a*	Surficial geology of the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 23 *in* A.R.C. Bulletin 32.
23b	Surficial deposits of sand and gravel in the Edmonton region; C.P. Kathol and R.A. McPherson, 1975. Scale 1:250,000. Figure 33 *in* A.R.C. Bulletin 32.

*Maps 23a to 23p are available in Alberta Research Council Bulletin 32 "Urban Geology of Edmonton"; or they may be purchased individually.

Surficial Geology - Alberta Research Council (continued)

Number on index map	Description
23c	Thickness of surficial deposits in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 24 *in* A.R.C. Bulletin 32.
23d	Thickness of glaciolacustrine sediments in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 29 *in* A.R.C. Bulletin 32.
23e	Thickness of glacial till in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 28 *in* A.R.C. Bulletin 32.
23f	Thickness of Saskatchewan gravels and sands and overburden in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 27 *in* A.R.C. Bulletin 32.
23g	Geological cross-sections in the Edmonton area; C.P. Kathol and R.A. McPherson (4 sheets), 1975. Figure 26 *in* A.R.C. Bulletin 32. (See 23h for Index to Cross-sections).
23h	Index map showing lines of geological cross-sections; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 25 *in* A.R.C. Bulletin 32. (See 23g for cross-sections).
23i	Susceptibility of deposits to erosion in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 41 *in* A.R.C. Bulletin 32.
23j	Susceptibility of deposits to slumping in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 42 *in* A.R.C. Bulletin 32.
23k	Potential sulfate hazard in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 38 *in* A.R.C. Bulletin 32.
23l	General construction conditions in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 36 *in* A.R.C. Bulletin 32.
23m	Suitability of the Edmonton area for deep sewer construction 0 to 50 feet (0 to 15 m) below the surface; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 43 *in* A.R.C. Bulletin 32.

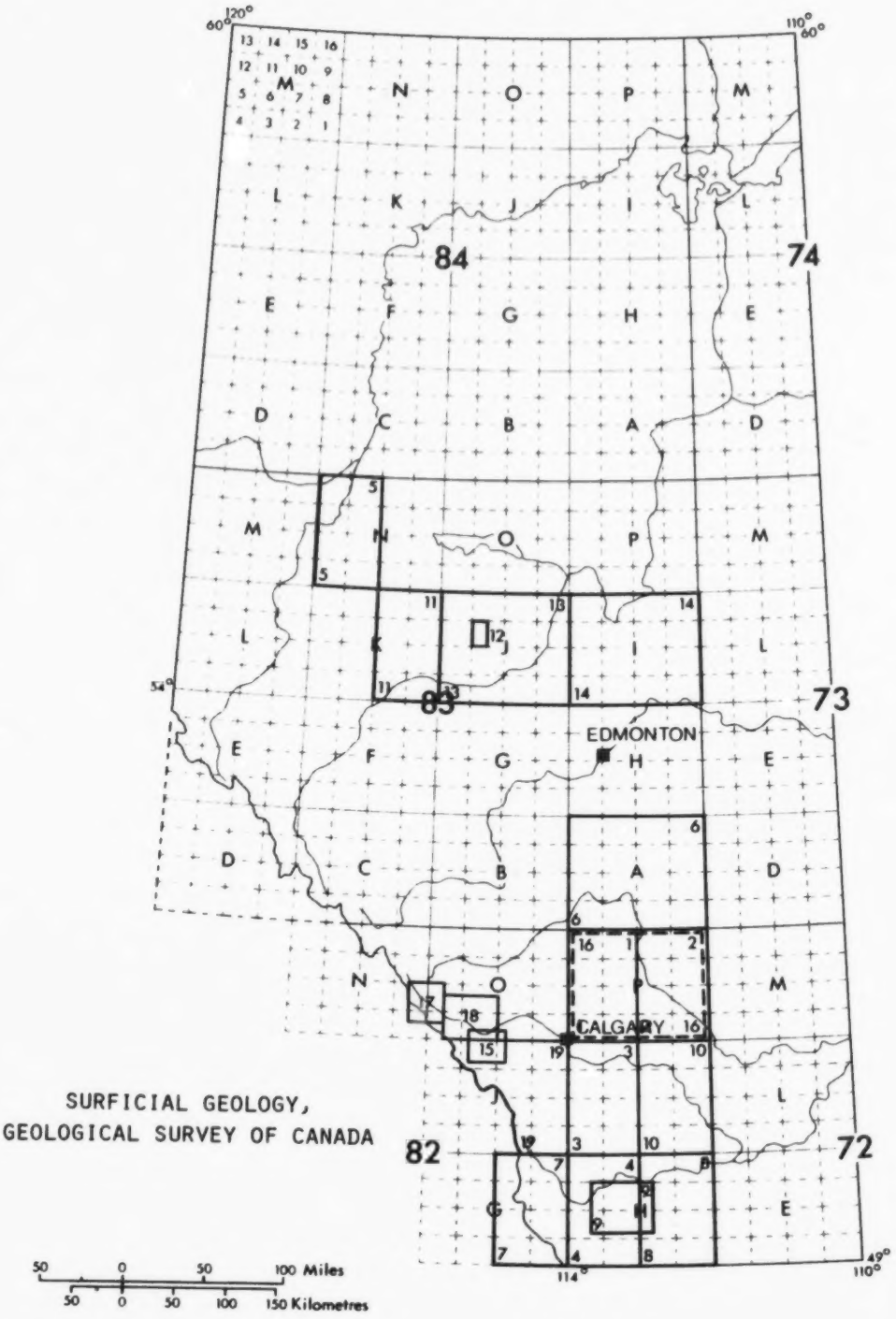
Surficial Geology - Alberta Research Council (continued)

Number on index map	Description
23n	Suitability of the Edmonton area for deep sewer construction 50 to 100 feet (15 to 30 m) below the surface; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 44 *in* A.R.C. Bulletin 32.
23o	Suitability of the Edmonton area for deep sewer construction at depths greater than 100 feet (30 m) below the surface; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 45 *in* A.R.C. Bulletin 32.
23p	Suitability of the Edmonton area for solid waste disposal; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 40 *in* A.R.C. Bulletin 32.
24	Surficial geology, House Mountain, Alberta; C.P. Kathol and R.A. McPherson, 1974. Scale 1:50,000. Accompanies A.R. Report 74-5. (out of print)
25a	Surficial geology of the Foothills of Alberta; L.A. Bayrock and T.H.F. Reimchen, 1974-1976. Scale 1:50,000. Available as transparent overlays for each of the National Topographic 1:50,000 map sheets. A.R.C. Open File No. 1975-24.
25b	Erosion potential of the Foothills of Alberta; L.A. Bayrock and T.H.F. Reimchen, 1974-1976. Scale 1:50,000. Available as transparent overlays for each of the National Topographic 1:50,000 map sheets. A.R.C. Open File No. 1975-24.
25c	Slope maps of the Alberta Foothills (four categories only); L.A. Bayrock and T.H.F. Reimchen, 1974-1976. Scale 1:50,000. Available as transparent overlays for each of the National Topographic 1:50,000 map sheets.
26	Surficial geology and maps related to urban geology[1], Calgary area; S. Moran *et al*. Scale 1:50,000 and 1:25,000. (in preparation)
27	Surficial geology, Sand River; L.D. Andriashek and M.M. Fenton. Scale 1:250,000. (in preparation)

[1]Similar in format and content to maps in Alberta Research Council Bulletin 32 "Urban Geology of Edmonton": (maps 23a to 23p).

Surficial Geology - Alberta Research Council (continued)

Number on index map	Description
28	Surficial geology, Whitesand River (north half); L.A. Bayrock. Scale 1:250,000. (in preparation)
29	Surficial geology, Fitzgerald (east of the Slave River) and Fort Chipewyan (north of Lake Athabasca, Mamawi Lake and Baril Lake); J.D. Godfrey. Scale 1:250,000. (in preparation)
30	Surficial geology, Athabasca Oil Sands area; R.A. McPherson and C.P. Kathol. Scale 1:50,000. Open File No. 1977-4.
31	Terrain analysis (including surficial deposits, topography and slope): Banff National Park, Alberta; L.A. Bayrock and T.H.F. Reimchen, 1976. Scale 1:50,000. Available from Parks Canada, Western Region, Calgary Office.
32	Terrain analysis (including surficial deposits, topography and slope): Jasper National Park, Alberta; L.A. Bayrock and T.H.F. Reimchen, 1976. Scale 1:50,000. Available from Parks Canada, Western Region, Calgary Office.
33	Terrain analysis (including surficial deposits, topography and slope): Wood Buffalo National Park, Alberta and Northwest Territories; L.A. Bayrock and T.H.F. Reimchen, 1976. Scale 1:100,000. Available from Parks Canada, Prairie Region, Winnipeg Office.
34	Athabasca Oil Sands potential mining areas; R.A. McPherson and C.P. Kathol. Scale 1:125,000. Open File No. 1977-4. Contains considerable detailed information.



SURFICIAL GEOLOGY,
GEOLOGICAL SURVEY OF CANADA

50 0 50 100 Miles
50 0 50 100 150 Kilometres

Surficial Geology - Geological Survey of Canada

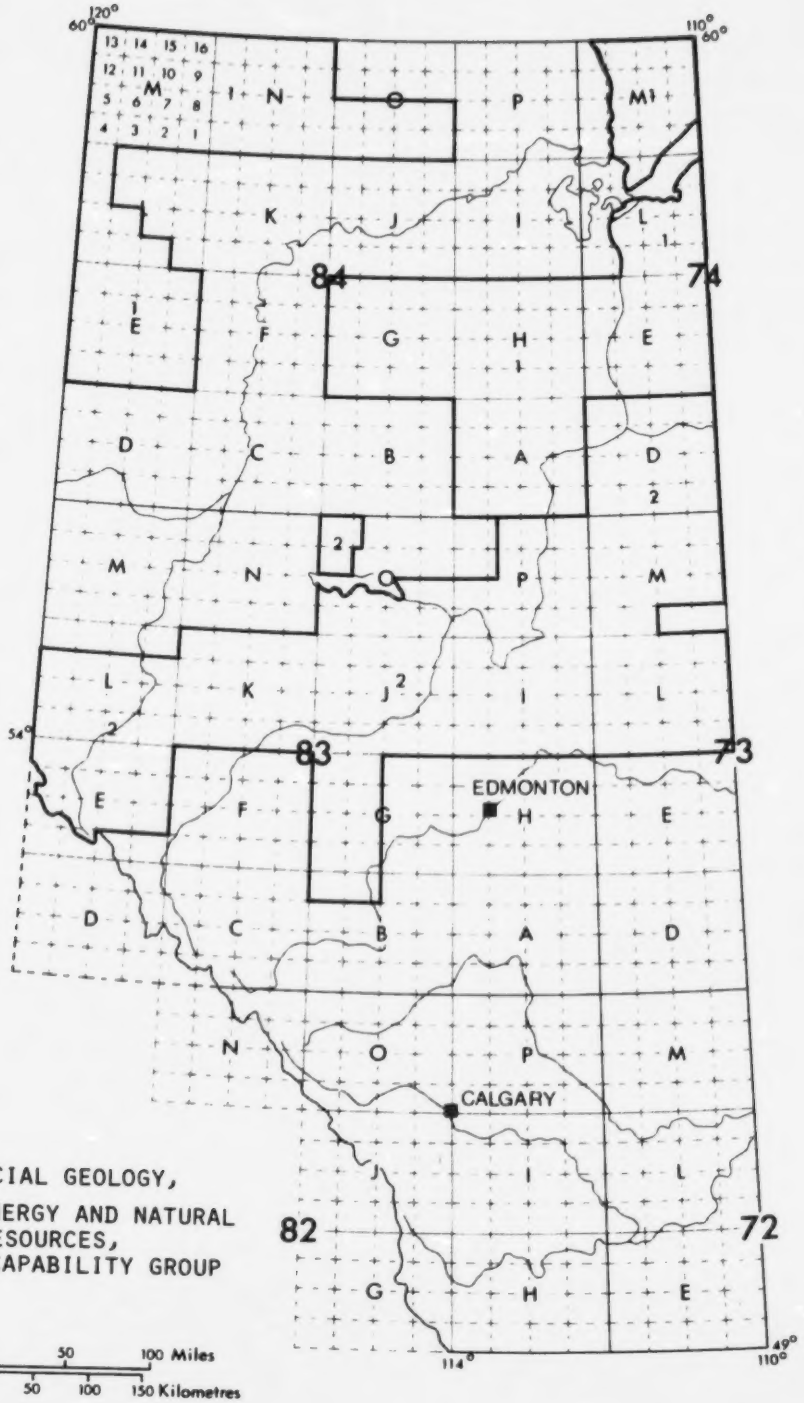
Number on index map	Description
1	Beiseker; A. MacS. Stalker, 1956. Map 55-7, scale 1 inch = 4 miles.
2	Drumheller; B.G. Craig, 1957. Map 13-1957, scale 1 inch = 4 miles.
3	High River; A. MacS. Stalker, 1957. Map 14-1957, scale 1 inch = 4 miles.
4	Fort Macleod; A. MacS. Stalker, 1959. Map 21-1958, scale 1 inch = 4 miles.
5	Sturgeon Lake; E.P. Henderson, 1960. Map 1077A, scale 1 inch = 4 miles. Accompanies G.S.C. Memoir 303.
6	Red Deer-Stettler; A. MacS. Stalker, 1960. Map 1081A, scale 1 inch = 4 miles. Accompanies G.S.C. Memoir 306.
7	Fernie (east half); A. MacS. Stalker, 1962. Map 31-1961, scale 1 inch = 4 miles.
8	Lethbridge (east half); A. MacS. Stalker, 1962. Map 41-1962, scale 1 inch = 4 miles.
9	Blood Indian Reserve; A. MacS. Stalker, 1963. Map 40-1963, scale 1 inch = 4 miles. Accompanies G.S.C. Paper 63-25.
10	Bassano; A. MacS. Stalker, 1965. Map 5-1965, scale 1 inch = 4 miles.
11	Iosegun Lake (east half); D.A. St.-Onge, 1967. Map 15-1966, scale 1 inch = 4 miles.
12	Geomorphology, Swan Hills; D.A. St.-Onge, 1969. Map 1206A, scale 1:50,000.
13	Whitecourt; D.A. St.-Onge, 1975. Map 1367A, scale 1:250,000.
14	Tawatinaw; D.A. St.-Onge, 1972. Scale 1:250,000. Accompanies Alberta Soil Survey Report 29.
15	Kananaskis Research Forest-Marmot Creek; A. MacS. Stalker, 1974. Map 1365A, scale 1:50,000. Accompanies G.S.C. Paper 72-51.

Surficial Geology - Geological Survey of Canada (continued)

Number on index map	Description
16	Drumheller; A. MacS. Stalker, 1973. Map 1336A, scale 1:250,000. Accompanies G.S.C. Memoir 370.
17a	Surficial geology, Banff area, N.W. Rutter, 1972. Map 1324A, Sheet 1, scale 1:50,000. Accompanies G.S.C. Bulletin 206.
17b	Relative ages of surficial deposits, Banff area; N.W. Rutter, 1972. Map 1325A, scale 1:250,000. Accompanies G.S.C. Bulletin 206.
18a	Surficial geology, Banff area; N.W. Rutter, 1972. Map 1324A, Sheet 2, scale 1:50,000. Accompanies G.S.C. Bulletin 206.
18b	Relative ages of surficial deposits, Banff area, N.W. Rutter, 1972. Map 1325A, scale 1:125,000. Accompanies G.S.C. Bulletin 206.
19	Kananaskis Lakes (Alberta portion of map sheet 82J). Scale 1:250,000. (in progress, 1975).

Surficial Deposits and Landforms - Resource Capability Group, Alberta Energy and Natural Resources

Number on index map	Description
1	Surficial deposits, landforms, slope, drainage, soil texture; various authors. Scale 1:63,360. Prepared but unpublished; may be viewed *by appointment*. (Use National Topographic System grid, on base map, to identify area of interest.)
2	Surficial deposits, landforms, slope, drainage, soil texture; various authors. Scale 1:63,360. In preparation; may be viewed as available *by appointment*. (Use National Topographic System grid, on base map, to identify area of interest.)



SURFICIAL GEOLOGY,
ALBERTA ENERGY AND NATURAL RESOURCES,
RESOURCE CAPABILITY GROUP

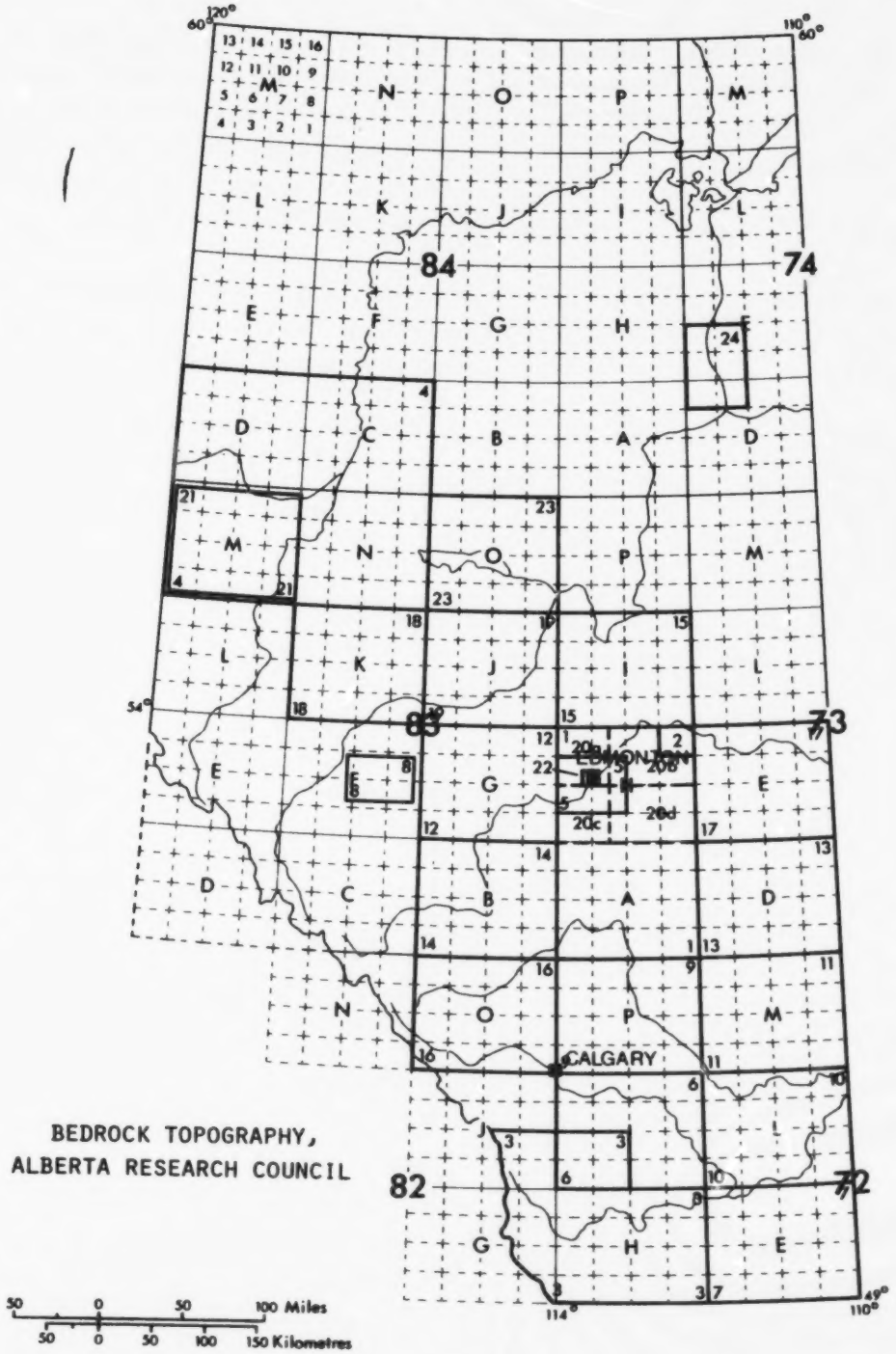
50 0 50 100 Miles
50 0 50 100 150 Kilometres

BEDROCK TOPOGRAPHY

This series of maps shows the topography of the bedrock surface, which in most parts of Alberta is covered by unconsolidated glacial and postglacial deposits to depths ranging from less than a metre up to about a hundred metres. The newer series of maps (beginning with item 9 below) has adopted a standard scale and format which shows, in addition to bedrock topography, the thickness of surficial deposits (drift) overlying bedrock, and the thalwegs of buried valleys developed on the bedrock surface prior to glaciation.

Bedrock topography and drift thickness maps have a number of practical applications involving exploration for mineral resources, groundwater aquifers, interpretation of geophysical data, and the planning of certain types of engineering projects.

For those areas where bedrock topography maps are not available, considerable information may be obtained from the hydrogeological map for the area (if available). (See section on Hydrogeological Maps.)



BEDROCK TOPOGRAPHY,
ALBERTA RESEARCH COUNCIL

50 0 50 100 Miles
50 0 50 100 150 Kilometres

Bedrock Topography - Alberta Research Council

Number on index map	Description
1	Bedrock topography, Edmonton-Red Deer map area, Alberta: R.N. Farvolden, 1963. Scale 1 inch = 6.5 miles. Accompanies R.C.A. Bulletin 12.
2	Bedrock topography, Andrew area; E.G. LeBreton, 1963. Scale 1 inch = 1.6 miles. Accompanies R.C.A. Bulletin 12.
3	Bedrock topography, southwestern Alberta; K.W. Geiger, 1965 (reprinted 1969). Scale 1 inch = 4 miles. Accompanies R.C.A. Report 65-1.
4	Bedrock topography and sand and gravel deposits, Peace River district; J.F. Jones, 1966. Scale 1 inch = 8 miles. Accompanies R.C.A. Bulletin 16.
5	Bedrock topography, Edmonton district; V.A. Carlson, 1967. Four maps, scale 1:50,000. Accompanies R.C.A. Report 66-3.
6	Bedrock topography of the Gleichen map area; K.W. Geiger, 1968. Scale 1:250,000. Accompanies R.C.A. Report 67-2.
7	Bedrock topography, Foremost-Cypress Hills area; J.A. Westgate, 1968. Scale 1:250,000. Accompanies R.C.A. Bulletin 22.
8	Bedrock topography, Edson area; G.M. Gabert and M.A. Roed, 1968. Two maps, scale 1:50,000. Accompanies R.C.A. Report 68-1.
9	Bedrock topography, Drumheller area; V.A. Carlson, 1969. Scale 1:250,000.
10	Bedrock topography, Medicine Hat area; V.A. Carlson, 1970. Scale 1:250,000.
11	Bedrock topography, Oyen area; V.A. Carlson, 1970. Scale 1:250,000.
12	Bedrock topography, Wabamun Lake area; V.A. Carlson, 1971. Scale 1:250,000.
13	Bedrock topography, Wainwright area; V.A. Carlson and L.M. Topp, 1971. Scale 1:250,000.
14	Bedrock topography, Rocky Mountain House area: V.A. Carlson, 1971. Scale 1:250,000.

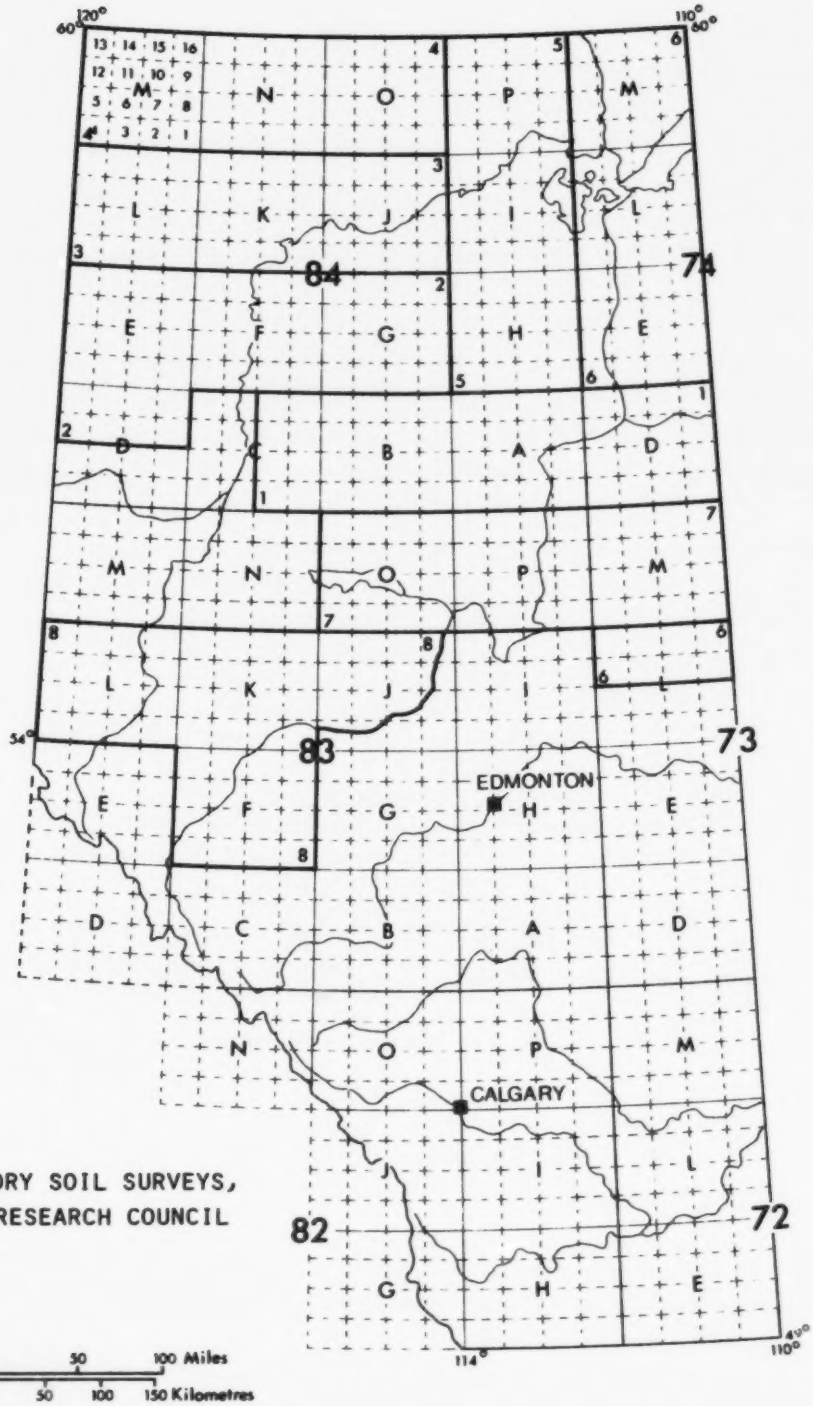
Bedrock Topography - Alberta Research Council (continued)

Number on index map	Description
15	Bedrock topography, Tawatinaw area; V.A. Carlson, 1977. Scale 1:250,000.
16	Bedrock topography, Calgary area; V.A. Carlson. Scale 1:250,000. (in preparation)
17	Bedrock topography, Vermilion area; V.A. Carlson and D.V. Currie, 1974. Scale 1:250,000.
18	Bedrock topography, Iosegun Lake area; V.A. Carlson. Scale 1:250,000. (in press)
19	Bedrock topography, Whitecourt area; V.A. Carlson and R. Green, 1977. Scale 1:250,000.
20a	Bedrock topography, Edmonton area (N.W. segment); R. Bibby. Scale 1:125,000. (in preparation)
20b	Bedrock topography, Edmonton area (N.E. segment); R. Stein. Scale 1:125,000. (in preparation)
20c	Bedrock topography, Edmonton area (S.W. segment); W. Ceroici. Scale 1:125,000. (in preparation)
20d	Bedrock topography, Edmonton area (S.E. segment); V.A. Carlson and R. Stein. Scale 1:125,000. (in preparation)
21	Bedrock topography, Grande Prairie; V.A. Carlson and D. Hackbarth, 1974. Scale 1:250,000.
22	Bedrock topography and preglacial thalwegs in the Edmonton area; C.P. Kathol and R.A. McPherson, 1975. Scale 1:50,000. Figure 20 *in* A.R.C. Bulletin 32.
23	Bedrock topography, Lesser Slave Lake area; R.I.J. Vogwill. Scale 1:250,000.
24	Bedrock topography, Athabasca oil sands potential mining area; R.A. McPherson and C.P. Kathol, 1977. Scale 1:125,000. Open File No. 1977-4.

SOILS MAPS

Soil is a mixture of weathered rock or sediment and organic matter formed by physical, chemical, and biological processes operating in the uppermost layer of the earth's surface. The type of soil formed depends on composition of the parent material, climate, vegetation, drainage, and the amount of time during which soil-forming processes have operated. Soils are classified according to the nature of their vertical profile: with depth soils change, and soils generally have more or less distinct horizons which reflect any changes. The sequence and properties (color, texture, and structure) of these horizons define soil type.

In Alberta, soils have been mapped at successively larger scales as the demand for more detailed information has developed. Exploratory surveys, carried out in the less populous northern and west-central parts of the province, involve cursory inspections of large areas and provide broad regional classifications of soil types. Reconnaissance surveys provide relatively detailed information for large areas, and detailed surveys provide precise information for selected smaller areas. Although the main objective of soil surveys in Alberta has been to outline and classify land for agricultural purposes, the maps provide information useful to planners of urban or parks development, managers of forest resources, scientists studying land reclamation, and anyone who needs to know more about Alberta's soil resources.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EDMONTON
CALGARY
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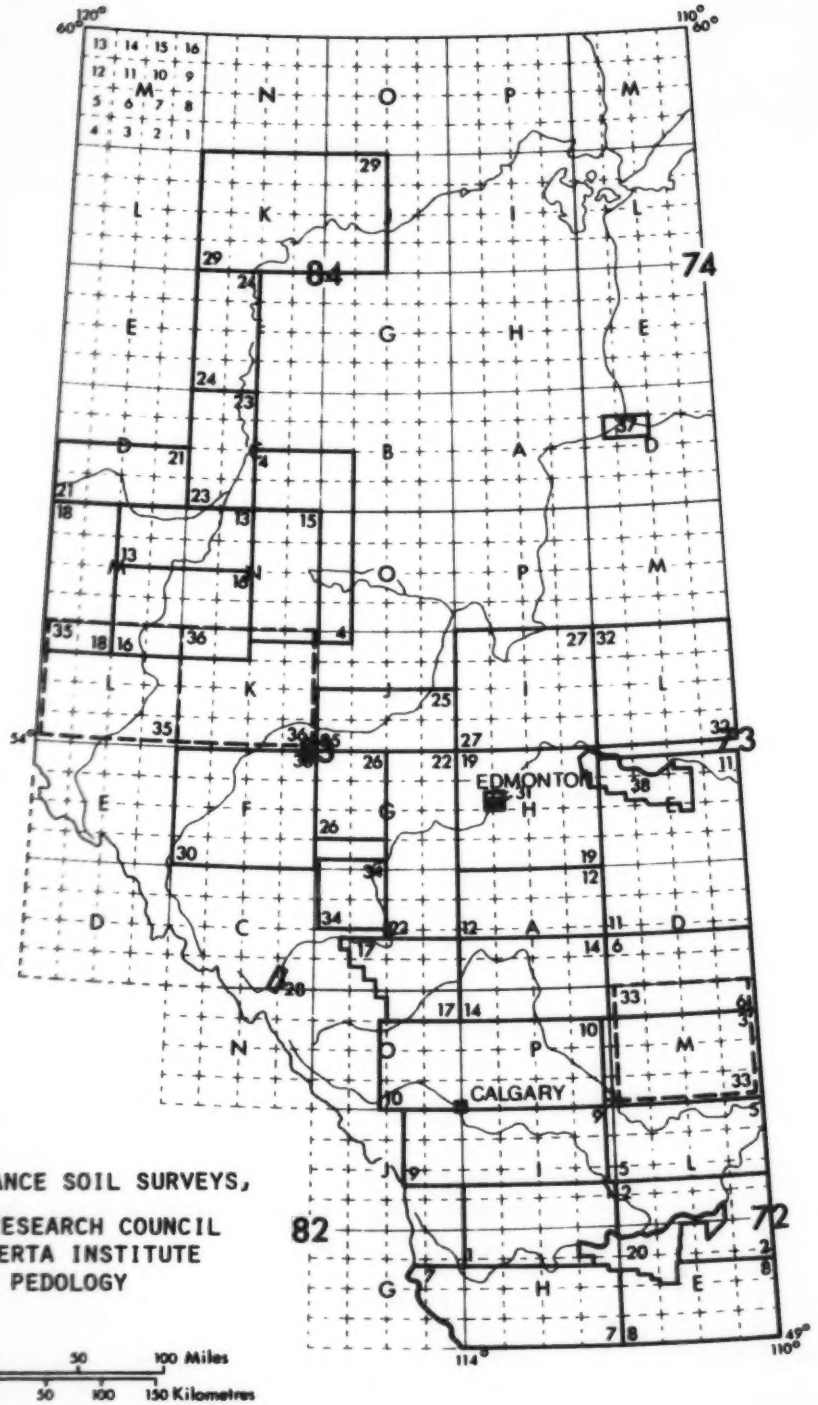
EXPLORATORY SOIL SURVEYS,
ALBERTA RESEARCH COUNCIL
50 0 50 100 Miles
50 0 50 100 150 Kilometres

Exploratory Soil Surveys - Alberta Research Council

Number on index map	Description
1	Exploratory soil survey of 84-C (east half), 84-B, 84-A, and 74-D; J.D. Lindsay, P.K. Heringa, S. Pawluk and W. Odynsky, 1957. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 58-1.
2	Exploratory soil survey of 84-D (north half), 84-E, 84-F, and 84-G; J.D. Lindsay, S. Pawluk and W. Odynsky, 1958. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 59-1.
3	Exploratory soil survey of 84-J, 84-K, and 84-L; J.D. Lindsay, S. Pawluk and W. Odynsky, 1959. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 60-1.
4	Exploratory soil survey of 84-M, 84-N, and 84-O; J.D. Lindsay, S. Pawluk and W. Odynsky, 1960. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 61-1.
5	Exploratory soil survey of 84-P, 84-I, and 84-H; J.D. Lindsay, S. Pawluk and W. Odynsky, 1961. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 62-1.
6*	Exploratory soil survey of 74-M, 74-L, 74-E, and 73-L (north half); J.D. Lindsay, S. Pawluk and W. Odynsky, 1962. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 63-1.
7	Exploratory soil survey of 83-O, 83-P, and 73-M; A. Wynnyk, J.D. Lindsay, P.K. Heringa and W. Odynsky, 1963. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 64-1.
8	Exploratory soil survey of 83-L, 83-K, 83-F, and 83-J; J.D. Lindsay, A. Wynnyk and W. Odynsky, 1963. Scale 1 inch = 12 miles. Accompanies R.C.A. Preliminary Soil Survey Report 64-2.

*Out of print.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RECONNAISSANCE SOIL SURVEYS,
ALBERTA RESEARCH COUNCIL
AND ALBERTA INSTITUTE
OF PEDOLOGY
50 0 50 100 Miles
50 0 50 100 150 Kilometres

Reconnaissance Soil Survey Maps and Reports
Alberta Research Council and Alberta Institute of Pedology

Number on index map	Description
1*	Macleod sheet; F.A. Wyatt and J.D. Newton, 1925. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 1.
2*	Medicine Hat sheet; F.A. Wyatt and J.D. Newton, 1926. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 2.
3*	Sounding Creek sheet; F.A. Wyatt and J.D. Newton, 1927. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 3.
4*	Peace River, High Prairie, Sturgeon Lake area; F.A. Wyatt, 1935. Scale 1 inch = 4 miles. Accompanies Alberta Soil Survey Report 6.
5*	Rainy Hills sheet; F.A. Wyatt *et al.*, 1937. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 7.
6*	Sullivan Lake sheet; F.A. Wyatt and J.D. Newton, 1938. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 8.
7*	Lethbridge and Pincher Creek sheets; F.A. Wyatt, 1939. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 9.
8*	Milk River sheet; F.A. Wyatt and J.D. Newton, 1941. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 10.
9*	Blackfoot and Calgary sheets; F.A. Wyatt and J.D. Newton, 1942. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 11.
10*	Rosebud and Banff Sheets; F.A. Wyatt and J.D. Newton, 1943. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 12.
11*	Wainwright and Vermilion sheets; F.A. Wyatt and J.D. Newton, 1944. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 13.
12*	Peace Hills sheet; F.A. Wyatt and J.D. Newton, 1947. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 14.

Reconnaissance Soil Survey Maps and Reports

Alberta Research Council and Alberta Institute of Pedology (continued)

Number on index map	Description
13*	Rycroft and Watino sheets; W. Odynsky and J.D. Newton, 1950. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 15.
14*	Red Deer sheet; W.E. Bowser and T.W. Peters, 1951. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 16.
15*	High Prairie and McLennan sheets; W. Odynsky *et al.*, 1952. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 17.
16	Grande Prairie and Sturgeon Lake sheets; W. Odynsky *et al.*, 1956. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 18.
17	Rocky Mountain House sheet; T.W. Peters and W.E. Bowser, 1960. Scale 1 inch = 2 miles. Accompanies Alberta Soil Survey Report 19.
18	Beaverlodge and Blueberry Mountain sheets; W. Odynsky *et al.*, 1961. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 20.
19*	Edmonton sheet; W.E. Bowser *et al.*, 1962. Scale 1 inch = 2 miles. Accompanies Alberta Soil Survey Report 21.
20	St. Mary and Milk Rivers development; W.E. Bowser *et al.*, 1963. Scale 1 inch = 1 mile. Accompanies Alberta Soil Survey Report 22.
21	Cherry Point and Hines Creek area; S.W. Reeder and W. Odynsky, 1965. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 23.
22	Buck Lake and Wabamun Lake area; J.D. Lindsay and T.W. Peters, 1968. Scale 1 inch = 2 miles. Accompanies Alberta Soil Survey Report 24.
23	Grimshaw and Notikewin area; M.D. Scheelar and W. Odynsky, 1968. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 25.
24	Hotchkiss and Keg River area; S.W. Reeder and W. Odynsky, 1969. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 26.

*Out of print; can be obtained on loan from the Department of Extension Library, University of Alberta, Edmonton, T6G 2G4

Reconnaissance Soil Survey Maps and Reports
Alberta Research Council and Alberta Institute of Pedology (continued)

Number on index map	Description
25	Whitecourt and Barrhead area; A. Wynnyk and J.D. Lindsay, 1971. Scale 1 inch = 2 miles. Accompanies Alberta Soil Survey Report 27.
26	Chip Lake area; A.G. Twardy and J.D. Lindsay, 1971. Scale 1 inch = 2 miles. Accompanies Alberta Soil Survey Report 28.
27	Tawatinaw sheet; A.A. Kjearsgaard, 1972. Scale 1 inch = 2 miles. Accompanies Alberta Soil Survey Report 29.
28	Land classification and soils in the Rocky Mountains of Alberta along the North Saskatchewan River valley; W.W. Pettapiece, 1971. Scale 1 1/4 inch = 1 mile. Alberta Institute of Pedology Report S-71-31.
29	Mt. Watt and Fort Vermilion area; M.D. Scheelar and T.M. Macyk, 1973. Scale 1 inch = 3 miles. Accompanies Alberta Soil Survey Report 30.
30	Hinton-Edson area; J. Dumanski *et al.*, 1973. Scale 1 inch = 2 miles. Accompanies Alberta Soil Survey Report 32.
31	Soils map of the Edmonton area (reproduced from Edmonton Soil Survey Sheet by W.E. Bowser *et al.*, 1962, scale 1 inch = 2 miles, which accompanies Alberta Soil Survey Report 21; see item 19* above). Scale 1:50,000. *In* Urban Geology of Edmonton, A.R.C. Bulletin 32, Figure 39.
32	Sand River sheet; S.S. Kocoaglu, 1975. Scale 1:126,720. Accompanies Alberta Soil Survey Report 34.
33	Oyen sheet; A.A. Kjearsgaard, 1975. Scale 1:126,720. Accompanies Alberta Soil Survey Report 36.
34	Brazeau Dam area; T.W. Peters. Scale 1:126,720 (in preparation; expected date of publication 1979). Alberta Soil Survey Report 40.
35	Wapiti sheet; A.G. Twardy, 1977. Scale 1:126,720. Accompanies Alberta Soil Survey Report 39.

Reconnaissance Soil Survey Maps and Reports

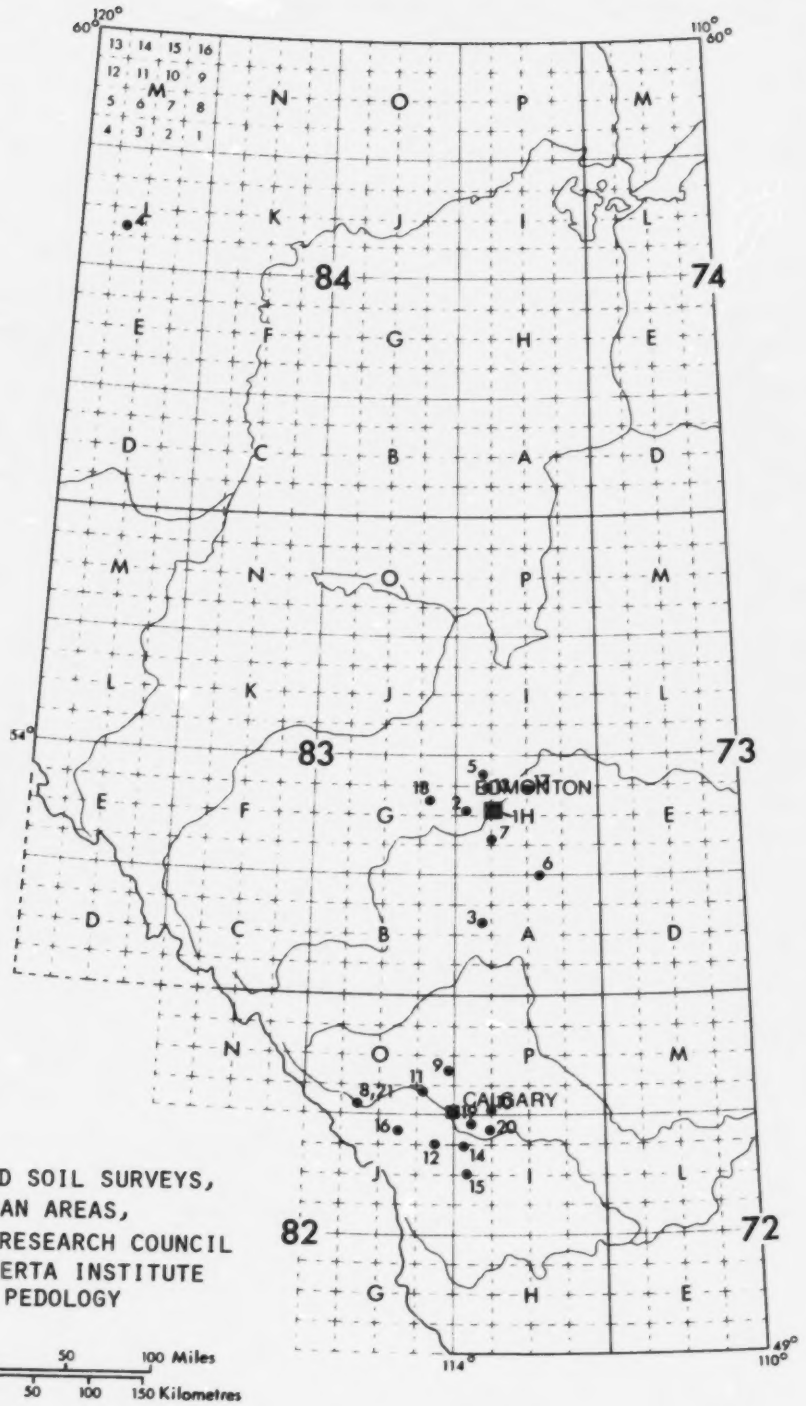
Alberta Research Council and Alberta Institute of Pedology (continued)

Number on index map	Description
36	Iosegun sheet; L.J. Knapik, 1978. Scale 1:126,720. Accompanies Alberta Soil Survey Report. (in preparation)
37	Fort McMurray region; P.H. Crown and A.G. Twardy, 1975. Scale 1:63,360. Alberta Institute of Pedology Report M-70-2.
38	County of Two Hills No. 21; T. Macyk. Scale 1:31,680. (in preparation; expected date of publication, 1978). Alberta Soil Survey Report 35.

Note: In most cases a soil rating map accompanies each report.

Detailed Soil Surveys of Urban Areas and Areas Adjacent to Urban Centers
Alberta Research Council and Alberta Institute of Pedology

Number on index map	Description
1	Soil survey for urban development, Edmonton, Alberta; J.D. Lindsay and M.D. Scheelar, 1972. Scale 1 inch = 680 feet. Accompanies R.C.A. Report 72-7.
2	Stony Plain, adjacent communities; soil interpretations for selected components of community development; M.D. Scheelar, 1973. A.R.C. Open File No. 1973-3.
3	Ponoka, town of; soil interpretations for selected components of community development; M.D. Scheelar, 1973. A.R.C. Open File No. 1973-4.
4	Rainbow Lake, town of; soil interpretations for selected components of community development; T. Macyk and M.D. Scheelar, 1973. A.R.C. Open File No. 1973-5.
5	Morinville, adjacent area; soil interpretations for selected components of community development; M.D. Scheelar, 1973. A.R.C. Open File No. 1973-6.
6	Camrose area; M.D. Scheelar, 1973. A.R.C. Open File No. 1973-7.
7	Leduc, town of; soil survey for community development; M.D. Scheelar, 1974. A.R.C. Open File No. 1974-10.
8	Canmore area, soil survey; L.J. Knapik, 1974. A.R.C. Open File No. 1974-20.
9	Airdrie area, soil survey; M.D. Scheelar, 1975. A.R.C. Open File No. 1975-3.
10	Strathmore area, soil survey; M.D. Scheelar, 1975. A.R.C. Open File No. 1975-4.
11	Cochrane area, soil survey; M.D. Scheelar, 1975. A.R.C. Open File No. 1975-7.
12	Black Diamond-Turner Valley area, soil survey; M.D. Scheelar, 1975. A.R.C. Open File No. 1975-8.
13	St. Albert area, soil survey; L.J. Knapik and C.F. Veauvy, 1975. A.R.C. Open File No. 1975-10.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DETAILED SOIL SURVEYS,
URBAN AREAS,
ALBERTA RESEARCH COUNCIL
AND ALBERTA INSTITUTE
OF PEDOLOGY
50 0 50 100 Miles
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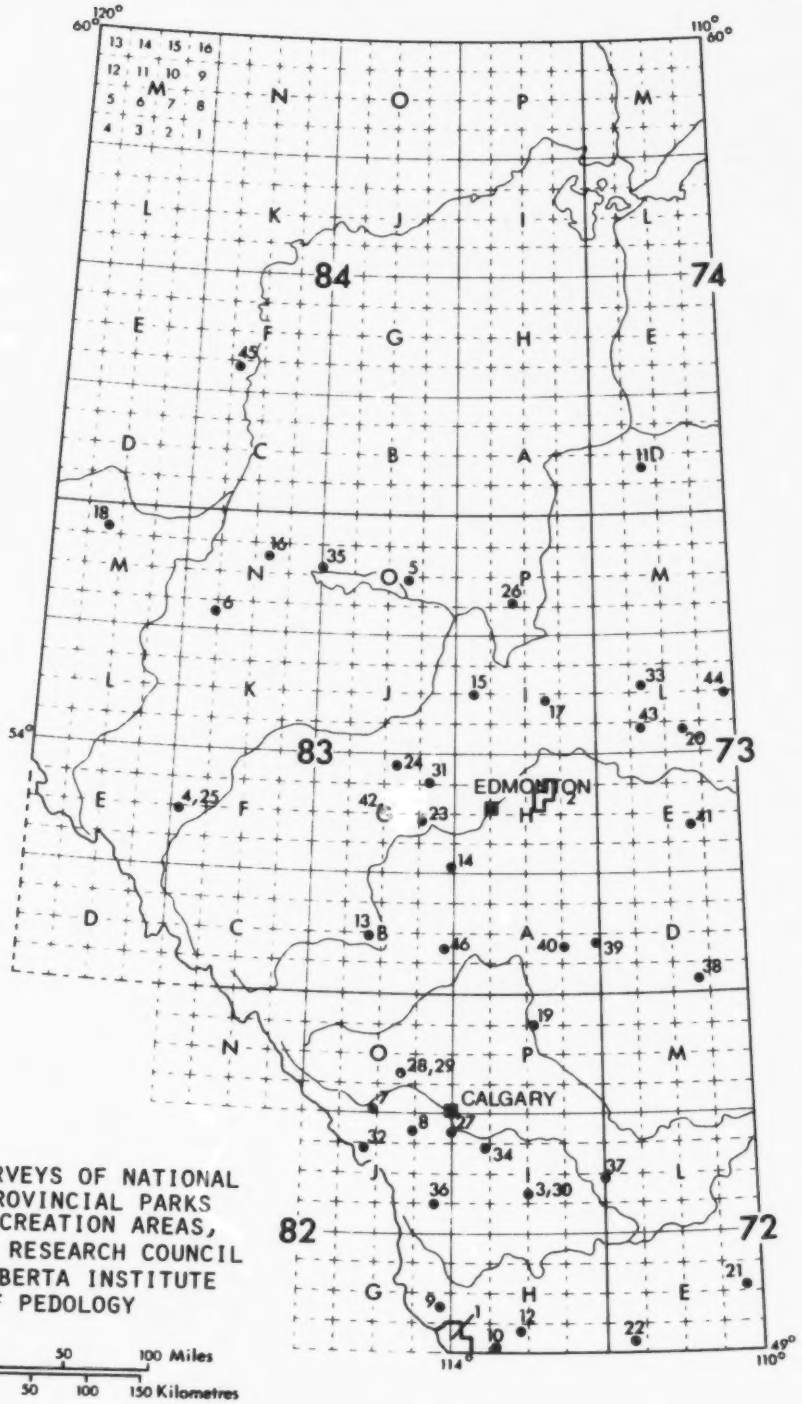
Detailed Soil Surveys of Urban Areas and Areas Adjacent to Urban Centers
Alberta Research Council and Alberta Institute of Pedology (continued)

Number on index map	Description
14	Okotoks area, soil survey; M.D. Scheelar, 1975. A.R.C. Open File No. 1975-11.
15	High River area, soil survey; M.D. Scheelar, 1975. A.R.C. Open File No. 1975-12.
16	Bragg Creek area, soil survey; M.D. Scheelar, 1977. A.R.C. Open File No. 1977-2.
17	Fort Saskatchewan area; M.D. Scheelar and C.F. Veauvy. (in preparation)
18	Lac Ste. Anne area; T.M. Macyk and C.F. Veauvy, 1977. Alberta Institute of Pedology Report M-77-9.
19	Langdon area; M.D. Scheelar and C.F. Veauvy. (in preparation)
20	Acme area; M.D. Scheelar and C.F. Veauvy. (in preparation)
21	Canmore Corridor, soil survey; M.D. Scheelar, 1977. Alberta Institute of Pedology Report M-76-13. (See also A.I.P. Report M-74-19.)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SOIL SURVEYS OF NATIONAL AND PROVINCIAL PARKS AND RECREATION AREAS, ALBERTA RESEARCH COUNCIL AND ALBERTA INSTITUTE OF PEDOLOGY
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National and Provincial Parks, and Areas Assessed for Parks Planning
Alberta Research Council and Alberta Institute of Pedology

Number on index map	Description
1	Waterton Lakes; 1975. Scale 1:15,560.
2	Elk Island.
3	Little Bow, soil survey and interpretation for recreational use; G.M. Greenlee, 1973. A.R.C. Open File No. 1973-2.
4	Entrance, soil survey and interpretation for recreational use; G.M. Greenlee, 1973. A.R.C. Open File No. 1973-8.
5	Lesser Slave Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1973. A.R.C. Open File No. 1973-12.
6	Young's Point, soil survey and interpretation for recreational use; G.M. Greenlee, 1973. A.R.C. Open File No. 1973-15.
7	Bow Valley and adjacent Kananaskis area, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-2.
8	Bragg Creek, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-6.
9	Beauvais Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-11.
10	Police Outpost, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-12.
11	Gregoire Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-13.
12	Woolford, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-14.
13	Crimson Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-15.

National and Provincial Parks, and Areas Assessed for Parks Planning
Alberta Research Council and Alberta Institute of Pedology (continued)

Number on index map	Description
14	Pigeon Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-17.
15	Cross Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1975. A.R.C. Open File No. 1975-1.
16	Winagami Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1975. A.R.C. Open File No. 1975-2.
17	Long Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1975. A.R.C. Open File No. 1975-5.
18	Moonshine Lake, soil survey and interpretation for recreational use; R.A. MacMillan and G.M. Greenlee, 1977. A.R.C. Open File No. 1977-1.
19	Dry Island Buffalo Jump, soil survey and interpretation for recreational use; G.M. Greenlee and R.A. MacMillan, 1977. Alberta Institute of Pedology Report M-77-6.
20	Moose Lake, soil survey and interpretation for recreational use; G.M. Greenlee and R.A. MacMillan, 1977. Alberta Institute of Pedology Report M-77-7.
21	Cypress Hills; G.M. Greenlee and R.A. MacMillan. (in preparation)
22	Writing-on-Stone; G.M. Greenlee and R.A. MacMillan. (in preparation)
23	Wabamun Lake; G.M. Greenlee and R.A. MacMillan. (in preparation)
24	Thunder Lake; G.M. Greenlee and R.A. MacMillan. (in preparation)
25	Blue Lake, (Entrance); G.M. Greenlee and R.A. MacMillan. (in preparation)
26	Calling Lake, adjacent area; soil survey and interpretation for recreational use; G.M. Greenlee, 1973. A.R.C. Open File No. 1973-16.

National and Provincial Parks, and Areas Assessed for Parks Planning
Alberta Research Council and Alberta Institute of Pedology (continued)

Number on index map	Description
27	Fish Creek Valley, adjacent to Calgary, Alberta, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-1.
28	Wildcat Hills area, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-3.
29	Wildcat Hills area, addendum to soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-4.
30	McGregor Lake, Travers Reservoir and Little Bow Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-5.
31	Lac Ste. Anne, soil survey and interpretation for recreational use; G.M. Greenlee, 1974. A.R.C. Open File No. 1974-7.
32	Kananaskis Lakes area, soil survey and interpretation for recreational use; G.M. Greenlee, 1976. A.R.C. Open File No. 1976-1.
33	Pinehurst Lake, soil survey and interpretation for recreational use; G.M. Greenlee, 1977. Alberta Institute of Pedology Report M-77-10.
34	Carseland, soil survey and interpretation for recreational use; G.M. Greenlee and R.A. MacMillan. (in preparation)
35	Hilliard's Bay, Lesser Slave Lake, soil survey and interpretation for recreational use; R.A. MacMillan and G.M. Greenlee, 1977. Alberta Institute of Pedology Report M-77-2.
36	Chain Lakes, soil survey and interpretation for recreational use; G.M. Greenlee. (in preparation)
37	Lake Newell area, soil survey and interpretation for recreational use; G.M. Greenlee. (in preparation)
38	Gooseberry Lake; G.M. Greenlee. (in preparation)

National and Provincial Parks, and Areas Assessed for Parks Planning
Alberta Research Council and Alberta Institute of Pedology (continued)

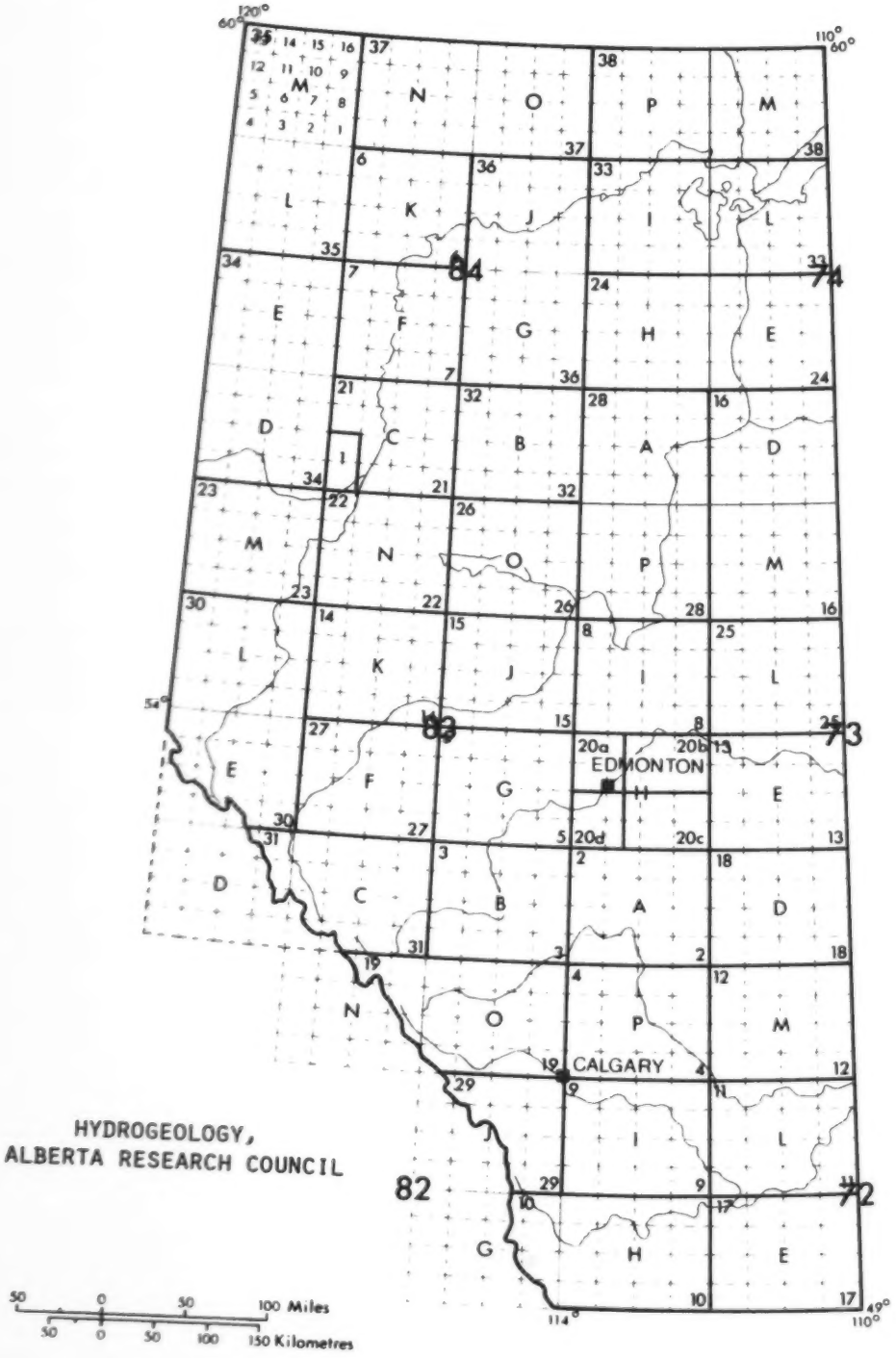
Number on index map	Description
39	Big Knife; G.M. Greenlee. (in preparation)
40	Rochon Sands; G.M. Greenlee. (in preparation)
41	Vermilion; G.M. Greenlee. (in preparation)
42	Pembina River; G.M. Greenlee. (in preparation)
43	Garner Lake; G.M. Greenlee. (in preparation)
44	Lund's Lake; G.M. Greenlee. (in preparation)
45	Notikewin River area; G.M. Greenlee. (in preparation)
46	Jarvis Bay; G.M. Greenlee and R.A. MacMillan. (in preparation)

HYDROGEOLOGY

Hydrogeological maps display information pertaining to the distribution, amounts, and quality of groundwater contained in the surficial deposits and bedrock formations of an area. Such maps contain a geological framework (showing the lithology and areal distribution of bedrock formations and surficial deposits) upon which various physical and chemical properties of groundwater supplies are superimposed.

The Alberta Research Council has published a number of maps and reports describing selected aspects of groundwater resources for different parts of the province. The most recent set of maps forms part of the hydrogeological reconnaissance map series and shows groundwater probabilities (expected average yields of wells drilled in areas under consideration), chemistry, and certain aspects of flow systems for map areas delineated by the National Topographic Series (NTS). Most of the maps are published on a scale of 1:250,000 and are compiled from data plotted on NTS maps at scales of 1:50,000 or 1:63,360. The latter maps form the working bases for compilation of the basic water well information for Alberta and may be inspected in the offices of the Groundwater Division, 3rd Floor, Campus Towers, 8625 - 112 Street, Edmonton, Alberta, Canada, T6G 1K8.

To assist the map user, the Alberta Research Council has prepared a legend and guide to interpreting the hydrogeological maps. This report, Earth Sciences Report 72-12; *A Legend and Guide for the Preparation and Use of the Alberta Hydrogeological Information and Reconnaissance Map Series,* is available from Publications, Alberta Research Council Library.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HYDROGEOLOGY,
ALBERTA RESEARCH COUNCIL
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Hydrogeological Map Series - Alberta Research Council

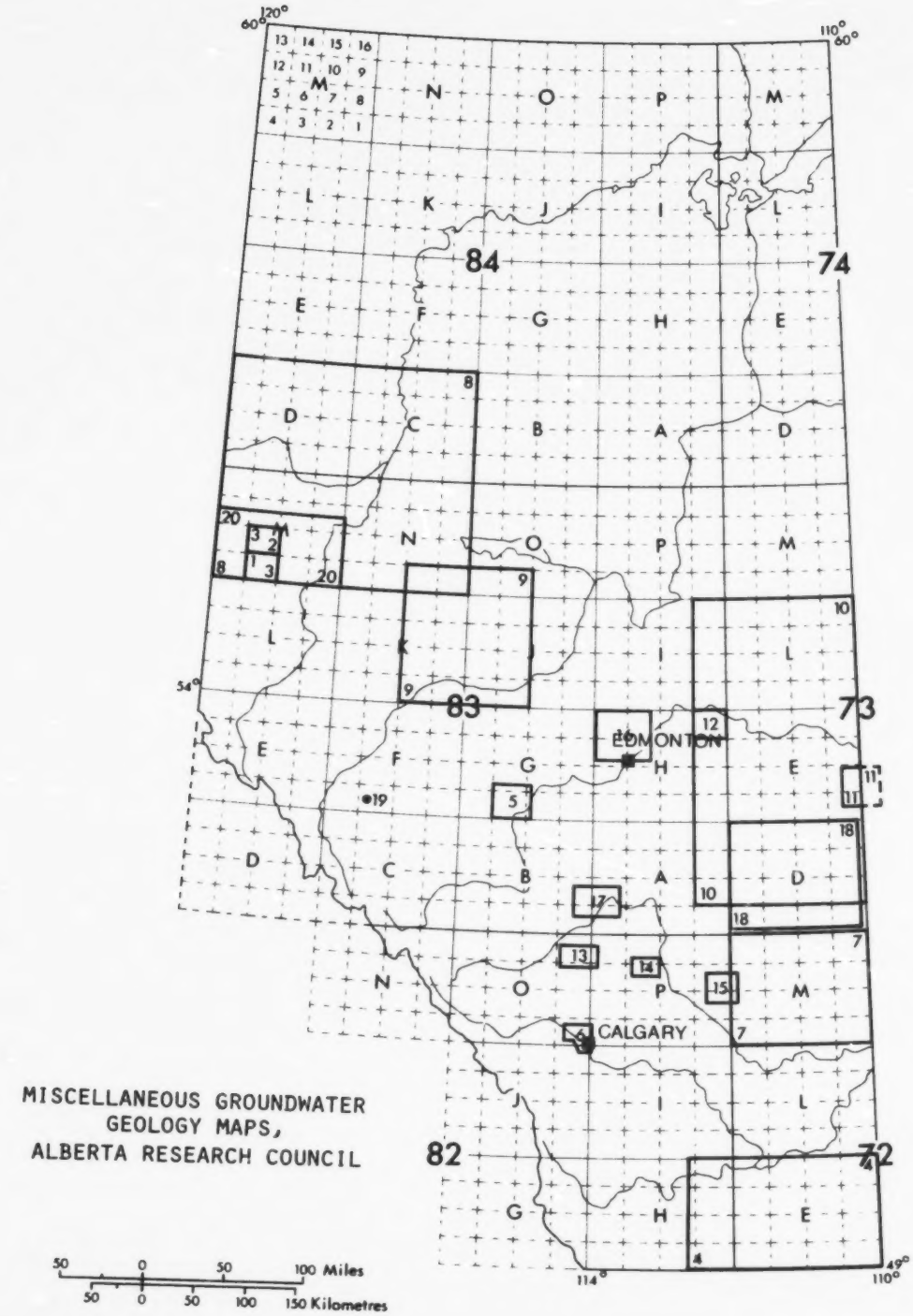
Number on index map	Description
1	Hydrogeology, Grimshaw-Chinook Valley; O. Tokarsky, 1970. Scale 1:125,000. Accompanies R.C.A. Earth Sciences Report 71-2.
2	Hydrogeology, Red Deer; E.G. LeBreton and R. Green, 1970. Scale 1:250,000. Accompanies R.C.A. Earth Sciences Report 71-1.
3	Hydrogeology, Rocky Mountain House; O. Tokarsky, 1971. Scale 1:250,000. Accompanies R.C.A. Earth Sciences Report 71-3.
4	Hydrogeology, Drumheller; D. Borneuf, 1972. Scale 1:250,000. Accompanies R.C.A. Earth Sciences Report 72-1.
5	Hydrogeology, Wabamun; G.F. Ozoray, 1972. Scale 1:250,000. Accompanies R.C.A. Earth Sciences Report 72-8.
6	Hydrogeology, Mount Watt; O. Tokarsky, 1972. Scale 1:250,000. Accompanies R.C.A. Earth Sciences Report 72-3.
7	Hydrogeology, Bison Lake; O. Tokarsky, 1972. Scale 1:250,000. Accompanies R.C.A. Earth Sciences Report 72-2.
8	Hydrogeology, Tawatinaw; D.M. Borneuf, 1973. Scale 1:250,000. Accompanies R.C.A. Earth Sciences Report 72-11.
9	Hydrogeology, Gleichen; G.F. Ozoray and A.T. Lytviak, 1974. Scale 1:250,000. Accompanies A.R. Earth Sciences Report 74-9.
10	Hydrogeology, Lethbridge-Fernie; O. Tokarsky, 1974. Scale 1:250,000. Accompanies A.R. Earth Sciences Report 74-1.
11	Hydrogeology, Medicine Hat; D.R. Stevenson and D.M. Borneuf. 1977. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 75-2.
12	Hydrogeology, Oyen; D.M. Borneuf. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 77-5. (in preparation)
13	Hydrogeology, Vermilion; D.V. Currie and N. Zacharko, 1975. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 75-5.

Hydrogeological Map Series - Alberta Research Council (continued)

Number on index map	Description
14	Hydrogeology, Iosegun; O. Tokarsky, 1977. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 76-2.
15	Hydrogeology, Whitecourt; O. Tokarsky, 1977. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 76-3.
16	Hydrogeology, Waterways-Winefred Lake; G.F. Ozoray, 1975. Scale 1:500,000. Accompanies A.R.C. Earth Sciences Report 74-2.
17	Hydrogeology, Foremost; D.M. Borneuf, 1976. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 74-4.
18	Hydrogeology, Wainwright; D.A. Hackbarth, 1976. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 75-1.
19	Hydrogeology, Calgary-Golden; G.F. Ozoray and R. Barnes. 1978. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 77-2.
20a	Hydrogeology, Edmonton (N.W. segment of NTS 83H); R. Bibby, 1974. Scale 1:125,000. Accompanies A.R. Earth Sciences Report 74-10.
20b	Hydrogeology, Edmonton (N.E. segment of NTS 83H); R. Stein, 1976. Scale 1:125,000. Accompanies A.R.C. Earth Sciences Report 76-1.
20c	Hydrogeology, Edmonton (S.E. segment of NTS 83H); R. Stein. Scale 1:125,000. (in preparation)
20d	Hydrogeology, Edmonton (S.W. segment of NTS 83H); W. Cercici. Scale 1:125,000. (in preparation)
21	Hydrogeology, Peace River; D.M. Borneuf. Scale 1:250,000. (in preparation)
22	Hydrogeology, Winagami; D.M. Borneuf. Scale 1:250,000. (in preparation)
23	Hydrogeology, Grande Prairie; D.A. Hackbarth. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 76-4. (in preparation)
24	Hydrogeology, Bitumount and Namur Lake; G.F. Ozoray, A.T. Lytviak, and D.A. Hackbarth. Scale 1:500,000. (in preparation)

Hydrogeological Map Series - Alberta Research Council (continued)

Number on index map	Description
25	Hydrogeology, Sand River; G.F. Ozoray and A.T. Lytviak. Scale 1:250,000. (in preparation)
26	Hydrogeology, Lesser Slave Lake; R.I.J. Vogwill. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 77-1. (in preparation)
27	Hydrogeology, Edson; R.I.J. Vogwill. Scale 1:250,000. (in preparation)
28	Hydrogeology, Pelican and Algar Lake; G.F. Ozoray and A.T. Lytviak. Scale 1:500,000. (in preparation)
29	Hydrogeology, Kananaskis Lakes; D.M. Borneuf. Scale 1:250,000. (in preparation)
30	Hydrogeology, Mount Robson and Wapiti; R. Barnes, 1977. Scale 1:500,000. Accompanies A.R.C. Earth Sciences Report 76-5.
31	Hydrogeology, Brazeau and Canoe River; R. Barnes. Scale 1:250,000. Accompanies A.R.C. Earth Sciences Report 77-6. (in preparation)
32	Hydrogeology, Peerless Lake; W. Ceroici. Scale 1:250,000. (in preparation)
33	Hydrogeology, Fort Chipewyan and Lake Claire; A.T. Lytviak. Scale 1:500,000. (in preparation)
34	Hydrogeology, Clear Hills and Chinchaga River. Scale 1:500,000. (in preparation)
35	Hydrogeology, Zama Lake and Bistcho Lake. Scale 1:500,000. (in preparation)
36	Hydrogeology, Wadlin Lake and Vermilion Chutes. Scale 1:500,000. (in preparation)
37	Hydrogeology, Steen River and Whitesand River. Scale 1:500,000. (in preparation)
38	Hydrogeology, Peace Point and Fitzgerald. Scale 1:500,000. (in preparation)


120°
110°
60°
54°
49°
114°
84
74
83
73
82
72
EDMONTON
CALGARY
MISCELLANEOUS GROUNDWATER
GEOLOGY MAPS,
ALBERTA RESEARCH COUNCIL
50 0 50 100 Miles
50 0 50 100 150 Kilometres

Hydrogeology - Miscellaneous Groundwater Geology and Related Maps
Alberta Research Council

Number on index map	Description
1	Groundwater geology, Beaverlodge district; J.F. Jones, 1959. Scale 1 inch = 2 miles. Accompanies R.C.A. Report 59-2 as map 59-2A.
2	Groundwater geology, Beaverlodge district; J.F. Jones, 1959. Scale 1 inch = 2 miles. Accompanies R.C.A. Report 59-2 as map 59-2B.
3	Piezometric surface, summer 1958, Beaverlodge district; J.F. Jones, 1959. Scale 1 inch = 1.8 miles. Accompanies R.C.A. Report 59-2 as map 59-2C.
4	Milk River Sandstone, southern Alberta (various maps); P. Meyboom, 1960. *In* R.C.A. Memoir 2.
5	Piezometric surface, Pembina district; R.N. Farvolden, 1961. Scale 1 inch = 2.14 miles. Accompanies R.C.A. Report 61-4.
6	Groundwater map, Calgary district; P. Meyboom, 1961. Scale 1:50,000. Accompanies R.C.A. Bulletin 8.
7	Groundwater probability of the bedrock, Oyen; groundwater probability of the drift, Oyen; G.R. Kunkle, 1962. Scale 1 inch = 4 miles. Accompanies R.C.A. Report 62-3.
8	Water well locations, Peace River district; J.F. Jones, 1962. Scale 1 inch = 8 miles. Accompanies R.C.A. Report 62-4.
9	Reconnaissance groundwater study, Swan Hills and adjacent districts; J.F. Jones, 1962. Scale 1 inch = 4 miles. Accompanies R.C.A. Report 62-5.
10	Groundwater geology and hydrogeology of east-central Alberta (various maps); E.G. LeBreton, 1963. *In* R.C.A. Bulletin 13.
11	Piezometric surface, Lloydminster district; E.G. LeBreton, 1963. Scale 1 inch = 2 miles. Accompanies R.C.A. Bulletin 12.

Hydrogeology - Miscellaneous Groundwater Geology and Related Maps
Alberta Research Council (continued)

Number on index map	Description
12	Piezometric surface, Andrew district; E.G. LeBreton, 1963. Scale 1 inch = 1.6 miles. Accompanies R.C.A. Bulletin 12.
13	Olds district, (various maps); J. Tóth, 1966. Accompanies R.C.A. Bulletin 17.
14	Three Hills district, (various maps); J. Tóth, 1968. Accompanies R.C.A. Bulletin 24.
15	Handhills Lake district, (various maps); A. Vanden Berg and D.H. Lennox, 1969. Accompanies R.C.A. Report 69-1.
16	Regional groundwater conditions, Edmonton (N.W. segment of NTS 83H) (various maps); R. Bibby, 1974. Scale 1 inch = 4.8 miles. Accompanies A.R. Report 74-6.
17	Red Deer and vicinity (various maps); G.M. Gabert, 1975. Accompanies A.R.C. Bulletin 31.
18	Regional chemistry, Wainwright area (various maps); D.A. Hackbarth, 1975. Scale 1 inch = 16 miles (approx.). Accompanies A.R.C. Earth Sciences Report 75-6.
19	Tri-Creek Basin (various maps); D.V. Currie, 1976. Accompanies Bulletin 33.
20	Regional groundwater conditions, Grande Prairie-Beaverlodge area (various maps); D.A. Hackbarth. 1978. Accompanies A.R.C. Earth Sciences Report 77-4.

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